

Why skills builders matter: Understanding the motivations behind course-taking among a  
focused subsection of noncompleters at a California community college

by

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B.A., Michigan State University, 1989  
M.B.A., Michigan State University, 1992

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF EDUCATION

Department of Educational Leadership  
College of Education

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

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## **Abstract**

Skills builders take courses at the community college to gain skills and often exit without completing a degree or certificate. Although the college categorizes them as noncompleters, skills builders believe they have met their educational goals. The purpose of this explanatory sequential mixed-method study was to explore skills builders' motivations for succeeding in courses taken at a community college and the relevance of those courses to their educational goals and job opportunities. The study addressed three primary research questions: What beliefs contributed to skills builders' success in community college courses? How relevant were completed courses to skills builders' educational goals? How relevant were completed courses to skills builders' job opportunities?

Using the expectancy-value theory (EVT) of motivation, the research results support the notion that skills builders were motivated to take courses to hone or learn new skills because of their enjoyment and interest in acquiring new competencies. This focus most closely matches the interest subtheme from the value side of EVT. Although other factors may influence motivation, and the results did have some slight variation by subgroups, overall, skills builders value being lifelong learners, gathering knowledge from experts in the field, and using it to grow in their life and career. It is not about a degree or certificate completion. Therefore, community colleges can look to change how they measure success for this segment and work with the business community to provide future skills training.

*Keywords:* Skills builders, noncompleters, career technical education (CTE), community college, skills training, educational goals, expectancy-value theory of motivation

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Approved by:

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## **Dedication**

This dissertation is dedicated to my incredible family—without your love and support, this accomplishment would not have been possible. A special dedication to my late mother, Paula Allan, who was always my biggest cheerleader. She saw the beginning of this journey but was unable to see the ending. It warms me to know she would be proud.

## **Chapter 1 - Introduction**

The world is changing, and so are expectations of what skills may be needed by the future workforce. Training is necessary, and community colleges continue to serve as an inexpensive option for those with varied educational needs; however, not all students attend college with the expressed intention of completing. Many come to community colleges with the desire to build work skills and increase employability. Few students intend to get a certificate or degree; they take specific courses and leave with the knowledge they need to succeed (Bahr, 2010). In 2016, the California Community Colleges Chancellor's Office (CCCCO) labeled this segment of students "skills builders" (Guthrie, 2016). These students benefit from the community college open-access policy to inexpensively meet their academic goals and further their careers. To skills builders, and possibly their employers, they are a success story; to that institution, they are often considered noncompleters (Guthrie, 2016; Jacoby, 2017). This study aimed to understand skills builders and explore this segment of learners' value to the community college.

### **Statement of the Problem**

The community college open-door policy provides numerous opportunities for all who wish to seek an education. This approach allows for a diverse population of students to enter the community college system with varied academic goals (Xu & Trimble, 2016). Whether young or old, the community college is a beacon for inexpensive educational options. Unfortunately, the definition of student success and corresponding funding currently ties to the awarding of certificates and degrees (Hirschy et al., 2011). Although college completion is a worthy goal, it does not encompass all students' needs (Jacoby, 2017). Placing focus on completion as the sole success measure for community colleges ignores the myriad of students' aspirations.

One such aspiration is to increase skills to either improve job prospects or secure a promotion (Bahr, 2018). Even those students with existing degrees often need to update their skills to meet technological advancements in their fields. This goal may lead skills builders to seek education from their local community college. As Adams et al. (2020) stated, “Community colleges should accept and champion that they are the nation’s primary provider of job-focused education and training” (p. 1). Although community colleges offer a wide variety of courses to serve students with goals ranging from degree completion to updating skills, only the former goal is acknowledged and awarded. Considering changes in technology and skills required to succeed in the workforce for both new and existing employees, colleges may need to rethink what defines success. For community colleges to meet their community responsibility and serve these focused students, research was needed to understand skills builders’ motivations to succeed in community college courses and the relevance education provides to their educational goals and job opportunities.

## **Background of the Problem**

Historically, student success is measured by community college completion rates (McClenney, 2019; Pierce, 2015; Schneider & Yin, 2012). The discussion of student retention leading to completion started more than 40 years ago and has remained the primary indicator of student success (Tinto, 2006). The assumption is students who persist to completion benefit more from their education than those who leave. Although the definition of college completion once meant an associate’s or bachelor’s degree, it has expanded over time to include certificates. According to Carnevale et al. (2012), awarding certificates increased from 6% in 1980 to 22% in 2012. Additionally, a report published by the National Center for Education Statistics stated a 7% increase in the number of certificates granted from 2009-2010 to 2018-2019 (Irwin et al.,

2021). Even adding this additional completion opportunity, many students still do not finish community college. With national graduation rates at 24%, perceptions exist that 2-year institutions fail in serving their students and community (Sigillo, 2018).

Additionally, state and federal policymakers have tied college funding to outcome measures, such as completing a degree or certificate, reaffirming the focus on completion over the past 2 decades (Bailey et al., 2005). Most reporting on student success is among first-time, full-time students, limiting reporting to a specific population enrolled at the community college. This reporting method creates the perception the college falls short of meeting student and local community's expectations. Understanding the evolving needs of the marketplace and policymakers, and considering the continuing struggle for community colleges to graduate students, the focus on completion for an institution is understandable.

However, community colleges are open-door institutions attracting students with varied interests and goals; this focus on completion all but ignores the student's intention for taking courses when entering college. Specifically, this graduation metric leaves out skills builders who are successful without receiving a degree or certificate. Skills builders take a limited number of courses, most often in career technical education (CTE), to keep their skills current and move ahead in their careers, frequently receiving economic benefits after finishing (Smith, 2016). Many of these students are employed and may have already earned a certificate or degree. According to Marcus (2020), "One in 12 students now at community colleges—or more than 940,000—previously earned a bachelor's degree, according to the American Association of Community Colleges" (para. 9). Many skills builders fall within this educated student population. They are often more likely to have a singular focus of taking one or more classes to increase specific competencies. For example, an architect taking a course to learn AutoCAD, a



program not existing before they graduated from college, would fall into the skills builders category. The community college becomes the affordable training hub for those students wanting to increase career aspirations. Once completed, this student segment takes the knowledge and skills learned and immediately transitions back into the local workforce.

Before naming this segment skills builders, the CCCCCO spent 2 years analyzing noncompleting students. They discovered skills builders “tend to be older and already have earned degrees or awards, which was an indicator they were only at the colleges to take a few courses while already working” (Smith, 2016, para. 8). With these research results, the CCCCCO began tracking skills builders’ outcome metrics and created statewide awareness by posting results to the publicly available Student Success Scorecard (SSS; Booth et al., 2015). This visual allowed for general and college-specific insights on skills builders. For example, statewide, skills builders received a 27.8% increase in their median earnings (CCCCCO, 2020a). However, these discoveries have done little to change entrenched perceptions that completion rates determine college success. In general, skills builders enter and leave the college, often without notice or acknowledgment.

There will likely be an additional incentive for skills builders to attend community college with anticipated labor market needs. According to the American Association of Community Colleges (2014), nearly two thirds of the country’s jobs will require a certificate or degree, equating to a need for 15-20 million educated workers by 2025. Taking even one course can open up job opportunities. As the current workforce nears retirement, and with the rapid change of technology making many middle-income or midlevel employees in need of enhanced skills, employers worry there may be a lack of adequate skilled workers to fill positions, possibly

hampering economic growth (Modestino, 2016). For those employees with training, this provides a growing opportunity.

For those workers currently lacking skills, the right training can lead to success. According to the latest Organisation for Economic Co-operation and Development (2020) report, this shift toward a skilled labor market demonstrates the need for lifelong adult education for skills development to effectively link training to workers, ultimately serving the workforce demand. A community college can create this link. Many of these positions fall into the category of middle skills, which require more than a high school diploma and less than a 4-year degree (Chanmugam et al., 2014). According to the National Skills Coalition, “middle-skill jobs account for 53% of United States’ labor market, but only 43% of the country’s workers are trained to the middle-skill level” (Cantor, 2018, p. 1).

This expected gap between middle skills jobs and those qualified for positions provides opportunities for training or retraining. Both the community college and employers need to collaborate to ensure current and potential employees fill the skills gap to meet market demands. Creating this connection is even more vital as “many unemployed workers will need education and training to find new jobs in sectors that have been less impacted by the pandemic” (Beer & Bray, 2020, p. 2). Many companies are also willing to show support. According to Modestino (2016), businesses may consider using market incentives to encourage their employees to obtain additional education and training to alleviate the workforce shortage.

Overall, skills builders who attend community colleges have distinct characteristics. They are more likely to be nontraditional students (age 25+), have clear academic goals, take specific courses, and exit college once they complete the courses of interest (Bahr, 2012; Bahr & Booth, 2012; Bailey et al., 2005). Multiple studies have analyzed the labor market returns of skills

builders compared to completers and by field of study (Bahr, 2018; Jepsen et al., 2014; Rzepka, 2018). Overall, benefits exist for those attending community college, even for a short time. Having details on who skills builders are and how their earnings change from courses completed is beneficial. However, a gap remains in understanding what motivates skills builders to succeed in classes taken and if those courses were relevant to their educational goals and job opportunities.

### **Purpose of the Study**

The purpose of this study was to explore skills builders' motivations for succeeding in courses taken at a community college and the relevance of those courses to their educational goals and job opportunities.

### **Primary Research Questions**

The study addressed three primary research questions (RQs):

RQ1. What beliefs contributed to skills builders' success in community college courses?

RQ2. How relevant were completed courses to skills builders' educational goals?

RQ3. How relevant were completed courses to skills builders' job opportunities?

### **Theoretical Framework**

As Lochmiller and Lester (2017) stated, the theoretical framework is the foundation conveying the study's perspective, while the conceptual framework explains the variables within the research and how they connect back to the broader lens. As the topic of skills builders was researched and explored, the theoretical framework acted as the blueprint to guide and support the study (Grant & Osanloo, 2014). After examination, expectancy-value theory (EVT) directly ties to skills builders' motivations.

EVT explores motivations as a function of two factors: (a) whether or not people believe they will be successful at a task and (b) the degree with which they perceive value around task participation (Cook & Artino, 2016). Stated as an equation, motivation (M) = expectancy (E) x value (V). According to Barron and Hulleman (2015), overarching this motivational theory is the ability of skills builders to answer “yes” to two fundamental questions: “Can I do the task?” (E) and “Do I want to do the task?” (V). Simply, skills builders who attend a community college need something to motivate them to attend (M) scoring high on believing they can pass their courses (E) and providing personal gain at the end of the process (V). Expectancy is about learning achievement, and the value is about choosing to attend (Cook & Artino, 2016). Understanding these motivational factors may assist community colleges in reaching and serving more students who fit this mold. Table 1.1 provides an overview of how EVT, for this study, aligned with the purpose and research questions.

**Table 1.1.**

*Overview of Research Questions to Theoretical Framework Alignment*

<b>Study Purpose</b>		
Explore skills builders’ motivations for succeeding in courses taken at the community college and the relevance of education for their educational goals and job opportunities		
Research Questions	Theoretical Framework	Research Areas to Explore
RQ1. What beliefs contributed to skills builders’ success in community college courses?	Expectations (E): Can I do the task? Do I think I can complete the task?	Goals Self-concept Task difficulty
RQ2. How relevant were completed courses to skills builders’ educational goals?	Value (V): Do I want to do the task? Why am I doing the task?	Intrinsic value or interest Extrinsic value or utility Attainment value or importance
RQ3. How relevant were completed courses to skills builders’ job opportunities?		Opportunity Cost

## **Methodology**

The research methodology was an explanatory sequential design mixed-method study. Drawing from Lochmiller and Lester (2017), explanatory research explores the behavior behind the research study of why and what. Explanatory research does not provide conclusive evidence but allows for a better understanding of what is being studied. The benefit of explanatory sequential design is it allows the researcher to use quantitative data to get an overarching picture of the research problem and then use qualitative data to refine and explain the general picture (Subedi, 2016).

For the skills builders research, specifically, this methodology allowed for the complete interpretation of why students were motivated to succeed in the course taken at community college and the relevance of the education they received to their educational goals and job opportunities. The first quantitative phase was an explanatory survey designed and administered to qualifying students mined from secondary college data. Two samples were used. The first was from students who completed nine or more vocational units or earned completed a credential or degree and were no longer enrolled. The second sample was students who completed nine or fewer credits, were no longer enrolled, and did not complete a degree or certificate. The inclusion of an open-ended question further explored student motivation for taking courses. Additionally, respondents were given the option to opt in to additional qualitative research interviews.

Upon completing and analyzing the first quantitative phase, the second phase began with qualitative interviews among a purposive sampling of Phase 1 willing respondents. Phase 2 analyzed skills builders' expectancy for success and the type of value placed on course relevance to gain more in-depth insights into motivations behind skills builders' course-taking behavior.

Together, the two phases were designed to create a clear picture of skills builders who attend community college for specific courses and exit without a certificate or degree.

### **Delimitations and Assumptions**

The research study occurred among students at College of the Desert (COD), located in the Southern California desert. Only those who attended COD and completed nine or more vocational or nine or fewer overall credits received the survey. Additionally, the population did not include those who decided to seek education at another higher education institution.

The researcher assumed the secondary data received from COD followed the pre-stated parameters and represented the skills builders population that has attended the college. Moreover, it was assumed those taking the survey responded truthfully and did not submit the survey more than once.

### **Significance of the Study**

Although community colleges serve the academic goals of various learner types, student success measures generally document the completion of certificates or degrees. Although data exist on skills builders, this information has not shifted college perceptions of student success (Guthrie, 2016; Smith, 2016). By understanding skills builders, community colleges will have information to educate faculty, staff, and administration on serving this niche student population.

With employers looking to community colleges to train or retrain their current and future workforce, this study provided insights into the motivations of the skills builders population to guide the creation of courses to serve future students and the needs of local employers. Understanding skills builders ensures courses exist that focus training for this population in alignment with local middle skills workforce expectations and needs (Lambert, 2020). Lastly, as

there is little to no current data on this student population, this research may inform policymakers to incorporate these students into funding metrics and success measures.

### **Definitions of Key Terms**

Following are the operational definitions for the terms mentioned in the study:

*Career technical education (CTE)* refers to programs or courses specializing in the skilled trades, applied sciences, modern technologies, and career preparation (Great Schools Partnership, 2014).

Completion refers to the attainment of a community college credential or degree or transfer to 4-year institutions (Booth, 2014).

*Middle skills* refers to the skills needed for jobs requiring more than a high school diploma and less than a 4-year degree (Chanmugam et al., 2014).

*Noncompleters* are students exiting community college without completing a credential or degree or transferring to 4-year institutions (Bahr, 2018).

*Skills builders* are CTE-focused students who master a limited number of skills and stop taking courses but do not complete community college or transfer to a 4-year institution (Booth et al., 2015).

### **Chapter Summary**

This chapter sets out the reasons and parameters around the need for research on skills builders. This study overview included an introduction to the study, the problem being addressed, the background of the problem, the purpose of the study, the research questions, and the significance of the study. The chapter also introduced the theoretical framework of the expectancy-value theory guiding the study. The chapter ends with delimitations, assumptions, and definitions of key terms used in the study.

## **Organization of the Study**

The study is organized in the following manner: Chapter 1 includes the study's overview and considerations. Chapter 2 provides a detailed literature review of factors related to skills builders who attend community colleges. The literature review analyzes the workforce considerations, skills builders research, and the theoretical framework. Chapter 3 presents the study's research methodology, including the research design, participant selection, instrumentation, and data collection processes. Chapter 4 describes the research findings. Chapter 5 concludes the dissertation with a discussion of findings, implications, and researcher recommendations surrounding the study.



## **Chapter 2 - Literature Review**

The purpose of this study was to explore skills builders' motivations for succeeding in courses taken at a community college and the relevance of those courses to their educational goals and job opportunities. To review, skills builders attend community college for a short time and then leave without completing a certificate or degree (Bahr, 2017). The literature review in this chapter provides content and context relevant to the study by using source documents (e.g., peer-reviewed journals, professional reports, industry-specific articles, dissertations, and books) discovered within Kansas State University databases and Google Scholar. Themes covered within this literature review include workforce considerations, skills builders research, and the theoretical framework. These areas provided insight into the topic and illuminate the research gaps the current research study substantiated.

### **Workforce Considerations**

The world is evolving, technology is expanding, and the workforce is aging. All of these factors demonstrate the need for skills development among workers. If workers of the future are not trained, there may be a lack of people to fill available jobs. This literature review section will explore workforce considerations that provide insights on factors affecting skills builders' decision to take courses relevant to their educational goals and job opportunities.

### **Labor Market Changes**

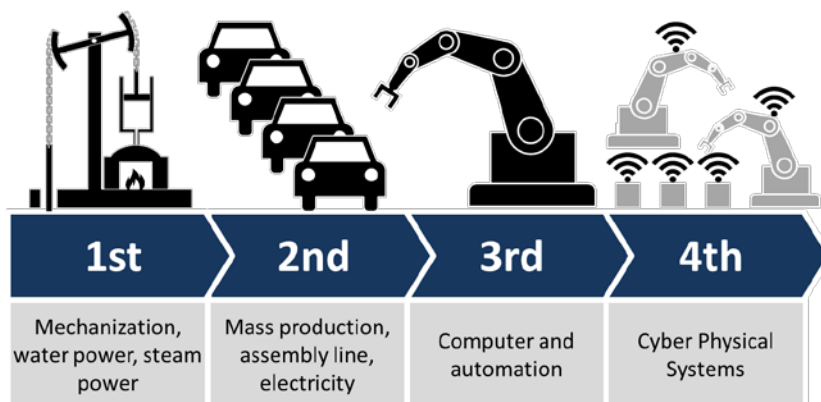
The world has changed. The COVID-19 pandemic created lockdowns, closed businesses, and led to a global recession not seen in 100 years. According to Hadzilacos et al. (2020), "As of mid-2020, 93% of the world's workers resided in countries with some form of workplace closure measure in place to prevent the spread of coronavirus" (p. 3). COVID-19 shut down businesses, forced worker layoffs, and generated unemployment numbers not seen since the early 1970s

(Stevenson, 2020). Even as countries slowly opened back up, continuing restrictions placed challenges on businesses and their workers. Of concern, jobs lost during COVID-19 may never return, potentially forcing workers to make difficult career transitions as the economy reopens (Brent et al., 2020). The extent of training needed for these workers is not known. In general, the “new normal” realities are undetermined, but businesses may need to alter their practices in response to COVID-19.

Before COVID-19 affected the economy, technological advances were shifting workforce demands and employer needs. Coined by the World Economic Forum’s Founder and Executive Chairman Klaus Schwab (2016), the Fourth Industrial Revolution (4IR) evolved from digital advances and “is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres” (para. 2). In short, the first revolution changed society from agriculture to manufacturing; the second focused on mass production and reliance on oil and electricity; the third allowed for information technology to automate production; and the fourth centers on digital domains and connected technology (Xu et al., 2018). Figure 2.1 is a visual representation of all stages of the industrial revolution.

**Figure 2.1.**

*Stages of the Industrial Revolution*



*Note.* Illustration showing the four main stages of the Industrial Revolution. Adapted from *File: Industry 4.0.png* [Image], by C. Roser, (2015). Wikimedia Commons.

([https://commons.wikimedia.org/wiki/File:Industry\\_4.0.png#file](https://commons.wikimedia.org/wiki/File:Industry_4.0.png#file)). CC-BY-SA-4.0.

As seen in Figure 2.1, each shift in revolution has increased the complexity level, making further demands for the world and its workforce. The central tenets behind 4IR will shape education moving forward (e.g., increase in online course offerings) and accelerate the need for workforce's reskilling (Penprase, 2018). The adjustment to how new technologies evolve and the need to close skills gaps will affect workforce training and reskilling. The community college is the logical place to provide this training or reskilling.

## **The Skills Gap**

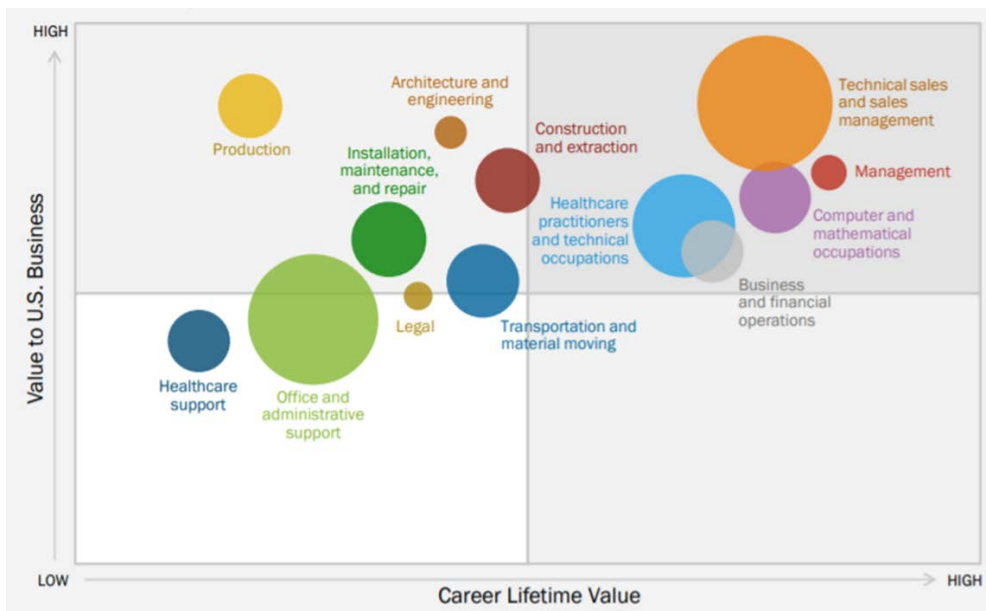
Before COVID-19 and the shift toward new technologies, there was much discussion on the gap between skills possessed by job seekers and skills required by employers (Cantor, 2018; Cappelli, 2015; Carnevale & Smith, 2012; Kochan et al., 2012; Smith et al., 2012). One area where the skills gap is apparent is within middle skills jobs. Middle-skill jobs requiring more than a high school education and less than a 4-year degree often fall into the technical positions (i.e., information technology, health care, and advanced manufacturing) and embody half of the country's employment (Adams et al., 2020). Approximately 37.7 million workers fall into the middle skills job category, many of which are nearing retirement (Modestino, 2016).

Although middle-skill jobs dominate the economy, a gap exists between those jobs and qualified workers to take the positions (53% vs. 43%, respectively), which hinders employers from having a reliable talent pipeline (Brown, 2018). The skills needed for middle skills jobs also have changed over the years. Labor market indicators have shown a mismatch between the skills of those seeking middle skills jobs and the needs of employers, contributing to the hiring of

workers from other countries (Modestino, 2016). According to Burrowes et al. (2013), more than three quarters of human resource managers interviewed (69%) had difficulty attracting and retaining qualified candidates, which affected their company's performance. This lack of a qualified domestic talent pool can have adverse effects on U.S. businesses' ability to stay competitive worldwide (Chanmugam et al., 2014). Figure 2.2 depicts the importance of middle skills occupations, taking into account the value to U.S. businesses (i.e., the importance of the job to strategic success) and career lifetime value (the likelihood a job will lead to high and improved standard of living) by sector (Chanmugam et al., 2014).

**Figure 2.2.**

*The Importance of Middle Skills Occupation Groups to U.S. Competitiveness*



*Note.* Bubble size reflects the relative number of job postings. Adapted from *Bridge the Gap: Rebuilding America's Middle Skills* by J. Burrowes, A. Young, D. Restuccia, J. Fuller, and M. Raman, 2013. Harvard Business School (<https://www.hbs.edu/competitiveness/Documents/bridge-the-gap.pdf>).

As seen in Figure 2.2, many middle skills job opportunities exist for candidates with proper training and skills, particularly in the technical sales and sales management sectors. Filling gaps in the talent pool is essential to the United States staying competitive.

Although middle skills jobs continue to be prevalent in the United States, they have seen a decline over the past 2 decades as new technologies have altered middle skills' occupations by creating jobs falling above and below the skills spectrum (Organisation for Economic Co-operation and Development, 2020). Employers continue to find it challenging to hire workers with the requisite skills to handle these new technologies (Bessen, 2014). For these workers, particularly those who fall into the low-skilled worker segment, adult learning allows for upskilling and reskilling is vital (Organisation for Economic Co-operation and Development, 2020). When looking at the information on skills builders, one can assume they enter the community college to take courses to fill the skills gap.

## **Workforce Retraining**

To have a competitive economy, governments and companies would benefit from a trained workforce to meet labor needs. This requirement has become amplified during the pandemic. According to the latest report from the Association of Community College Trustees, "People who have been negatively impacted by the pandemic will need robust supports to ensure their well-being, including education and training to gain the skills for new job opportunities" (Beer & Bray, 2020, p. 9). Even before COVID-19, the infrastructure for training workers on future skills was under-developed. According to the American Workforce Policy Advisory Board (2020), as the United States recovers from these economic challenges, employers and educational institutions' responsibility is to retrain the labor force on emerging skill needs. According to the 2018 Future of Jobs Report, the increase in automation changed the nature of

jobs, requiring an additional 101 days of learning for workers by 2022 (Leopold et al., 2018). The 2020 report update goes further by adding in the complications created from COVID-19, reporting businesses anticipate half of all current employees will require reskilling, and 1 in 4 workers will see changes in their core skills by 2025 (Zahidi et al., 2020). Among those requiring reskilling, companies in the United States have significantly higher expectations of training duration. Although 40% of all countries surveyed expected reskilling to take 6 months or less, this percentage jumped to 55% for companies in the United States (Zahidi et al., 2020).

With U.S. companies expecting quick reskilling, workers must find short-term training or courses to meet these expectations. These factors amplify the importance of bridging the gap between business and higher education to ensure training exists. Even if a student does not complete college, “business people are looking for school leavers to have skills and talents before employing them” (Kuiper, 2002, p. 21). Community colleges, which serve diverse students and provide specialized training, are ideal for meeting this emerging need (Adams et al., 2020).

These changes in the labor force and the gap of middle skills jobs provide opportunities for current workers who have lost their jobs, are looking to progress in their career, or change companies. In many cases, this is where most skills builders may fall. Simply, to stay relevant in the workforce, workers must continue to update their skills (Smith et al., 2012). The process of lifelong learning and advancing competencies, common in skills builders, is seen as a requirement to progress in a career. According to the 2016 Pew Research Study:

More than half (54%) of adults in the labor force say it will be essential for them to get training and develop new skills throughout their work life in order to keep up with changes in the workplace. And 35% of workers, including about three-in-ten (27%)

adults with at least a bachelor's degree, say they don't have the education and training they need to get ahead at work. Many are already taking action or being required to do so by their employer or by licensing requirements in their jobs: 45% of employed adults say they got extra training to improve their job skills in the past 12 months. (Fry et al., 2016, p. 5)

Although retraining is essential, some employees are hesitant to participate in training. In the study Fouarge et al. (2013) conducted, low-educated workers were less willing to complete training than those who were highly educated, even if participation benefitted their career.

Although the researchers discovered both groups' economic returns were similar, low-educated workers were less willing to participate in training due to not wanting to give up leisure time and anxiety over taking exams or prior negative learning experiences (Fouarge et al., 2013).

Reaching this hesitant worker becomes vital when considering the need to upskill workers into evolving middle skills jobs.

Therefore, an employee's willingness to retrain or increase skills is paramount to staying competitive in the workforce. Support for this assumption comes from recent results of the Center for Consumer Insights survey conducted during the COVID-19 crises. The Work and Education Survey results for June 2020 found 62% of Americans expressed interest in nondegree or skills training that would provide a better value, better fit to personal needs, and benefit their job and career advancement (Dunham, 2020). According to Kuiper (2002), "Education for occupational change is emerging as a mainstream activity but is still little-noticed" (p. 322). Although this trend is changing with advancements in technology, more awareness of skills training is still needed. Without a proper understanding of the retraining needs within the local

workforce, the community college may miss opportunities to assist businesses and employees in meeting the needs of a changing economy.

In summary, labor market changes, such as the 4IR, the skills gap related to middle skills jobs, and the evolving need for reskilling of the workforce, are all possible trends influencing skills builders to take courses at a community college.

## **Skills Builders Research**

Skills builders successfully take classes at the community college and leave without a certificate or degree. Other terms for skills builders include noncompleter, drop-ins, leavers, retoolers, and upskillers (Bahr, 2010; Kuiper, 2002; Marriott, 2014; Mullin, 2010; Watkins, 2019; Zeidenberg et al., 2015). Although the terms differ, the learner type remains the same. This section will explore research on skills builders and their educational goals, labor market returns, differences by field of study, and demographic differences.

### **Understanding Skills Builders**

Differentiating skills builders from other student groups allows researchers to understand how they are unique. Bahr (2010) attempted to understand what differentiated first-time students and created six clusters to describe student behavior: transfer, vocational, drop-in, noncredit, experimental, and exploratory. Using student records, the researcher discovered 32% of the sample consisted of drop-in students who attended for 1 year or less and had an average age of 35 years old (Bahr, 2010). The analysis revealed “students in this cluster generally enrolled in a few courses, succeeded in those courses at a rate exceeding the average success rate of students in any other cluster, and then exited the community college” (Bahr, 2010, p. 742). This research demonstrated the high prevalence of successful skills builders in the community college system, with a singular focus on an end goal. From the college perspective, Bahr’s research demonstrated



efforts to retain students within the drop-in cluster may be unproductive, and those efforts may need to focus on students in other clusters. Therefore, colleges may need to consider other ways to serve drop-in or skills builders. According to Booth & Bahr (2013), “Being able to identify skills-builder students and track their course-taking are important first steps for community colleges in understanding the needs and outcomes of these students” (p. 6).

### **Student Educational Goals**

According to the CCCCCO (2020a), 1 in 4 exiting CTE students are considered skills builders. These students “may seek to take a single course, acquire industry credentials, or enroll in a program until they find suitable employment” (Hirschy et al., 2011, p. 312). Skills builders may differ from traditional college students. They are often working adults who enroll to learn a new program (e.g., Microsoft Office) or take courses to maintain their professional licensing (Mullin, 2010). Research has shown skills builders may already have a certificate or degree but chose to return to college for additional knowledge and skills, making the community college a vital (re)launching pad for students and the local community (Mullin & Phillippe, 2013).

Student success definitions, however, may vary between students and the college they attend (Hirschy et al., 2011). Student success measures derive from institution completion measures, but the focus on lifelong learning, where students come in and out of college as their needs arise, demonstrates why there is a need to understand underlying student goals and what they consider completion (Yorke & Longden, 2004). When students leave college without a certificate or degree, the institution considers them a failure. However, research has shown the student attrition rate, or the number of students who leave before completion, is not always negative; there is such a thing as positive attrition. For example, in a study among 1,000 students who dropped out of Cuyamaca College during the fall of 1990, almost 8 in 10 (78%) were

successful in their classes and satisfied their educational goals (Fralick, 1993). The overall makeup of this successful cohort was “part-time, adult students who worked full-time” (Fralick, 1993, p. 2). This positive attrition rate among those who voluntarily leave college demonstrates the need for clarity on student educational goals or learning outcomes. Therefore, it is beneficial for community colleges to compare the student outcome to their original educational goal and only label them a dropout or failure if they leave before achieving their goal (Hagedorn, 2006).

This comparison is beneficial only if students accurately indicate their educational goals when enrolling. Skills builders seeking job skills may still select degree completion as their educational goal on their application, complicating the process of categorizing them as meeting their outcomes (Bailey et al., 2005). Selecting the wrong educational goal may be attributed to the difficulty navigating the long list of options listed in the application. For example, to apply to a California community college, an applicant must choose between 15 different educational goals from the dropdown list (CCCCO, 2019). The categories relating to skills builders appear in the middle of the list, after completion choices, where they might be overlooked. Table 2.1 provides the full list of educational goals from CCCApply.

**Table 2.1.**

*Educational Goals Data Element*

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Data Element:	edu_goal
Description:	Applicant's answer to Educational Goal
Values:	A - Obtain an associate degree and transfer to a four-year institution B - Transfer to a 4-year institution without an associate degree C - Obtain a 2-year associate degree without transfer E - Earn a career technical certificate without transfer F - Discover / formulate career interests, plans, goals G - Prepare for a new career (acquire job skills) H - Advance in current job / career (update job skills) I - Maintain certificate or license (e.g. Nursing, Real Estate) J - Educational development (intellectual, cultural) K - Improve basic skills in English, reading or math L - Complete credits for high school diploma or GED M - Undecided on goal N - To move from noncredit coursework to credit coursework O - 4-year college student taking courses to meet 4-year college requirements

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*Note.* List of all educational goals presented to students when applying to take courses at a California Community College. Adapted from *CCCApply Project Center*, by California Community Colleges Chancellor's Office, 2019. (<https://cccapplyproject.org/documents/data-dictionaries-specs>).

Skills builders who enter college for limited courses may not read through all the choices shown in Table 2.1 to select the one fitting their true intentions. Therefore, it is warranted to go beyond analyzing student provided educational goals upon college entry and research the motivations of those voluntarily leaving community college without a certificate or degree.

### **Labor Market Returns**

Much of the research on skills builders centers on the positive labor market returns from course taking. Research conducted by Grubb (1995) studied the subbaccalaureate (i.e., middle skills) labor market from the National Longitudinal Study of the Class of 1972 and discovered although earning a certificate provided benefits, men who failed to complete coursework, but

earned credits in a vocational subject, also received returns on their college investment. This study created a connection between taking courses and positive student outcomes.

Carruthers and Sanford (2018) further supported these results by exploring the benefits of adult technical education and its return for completers and noncompleters. Through research on students enrolled in the Tennessee Colleges of Applied Technology (TCAT), it was discovered although there is a growing importance of subbaccalaureate credentials, even students who did not complete the certificate saw wage gains when compared to those who never attended college with a similar wage history (Carruthers & Sanford, 2018). The significance of this study is it demonstrated “technical education can facilitate course corrections in the form of new industries of employment, higher rates of employment, and higher earnings overall” (Carruthers & Sanford, 2018, p. 158).

Giani et al. (2020) explored skills builders from another perspective when they analyzed employability and earnings for noncompleters compared to those who do not continue their education beyond high school. Overall, students falling into the “some college” category were “considerably more likely to be employed fifteen years after high school graduation and tend to earn significantly more than their counterparts who do not go to college” (Giani et al., 2020, p. 514). This research provides insight into the importance of course taking, even without completion, because it leads to better economic outcomes. Improvements were experienced by all groups, with women, minorities, and those in lower income bracket seeing the most benefits, demonstrating how college courses lead to labor market improvements (Giani et al., 2020).

Other factors also play into the determination of success. Grubb (1995) noted earnings for noncompleters varied by subject area of courses taken. This variation of economic benefits, according to the subject area, is further supported in similar research. Jacobson et al. (2005)

explored the benefits of retraining displaced workers discovered those taking more technically oriented vocational courses received higher earnings than those who did not. Kallik (2020) found a positive correlation between the number of units taken and wage growth. Specifically, “the study found that units completed predicted 90.1% of the expected 1-year wage growth and 91.5% of 3-year wage growth of students in the sample population” (Kallik, 2020, p. iv). Lerman et al. (2000) researched those in the information technology field and found both completers and leavers had high employment rates (88.6% vs. 84.7%, respectfully). In terms of mean salary, leavers focusing on programming earned on par what completers earned and earned more when the focus was tech support (Lerman et al., 2000). Lerman et al. (2000) concluded, “These employment outcomes suggest that an associate’s degree may not be as highly valued as the actual skills themselves” (p. 21).

Bahr’s (2018) research also supported the connection between earnings and field of study when exploring the outcomes for noncompleters taking courses in 24 different study fields. Using more than 1 million California community college student records that included quarterly earnings, Bahr analyzed and disaggregated student outcomes to gain insights into a student’s return on college investment. Results demonstrated positive economic returns for CTE fields with a strong link to the labor market (e.g., engineering and industrial technologies, public service, accounting, and information technology) but are not considered credential-intensive fields (e.g., health and law; Bahr, 2018). The research showed how there is variation in how CTE fields may differ in creating positive economic outcomes, providing guidance in curriculum development for community colleges. Based on similar research conducted in Michigan, Bahr (2017) suggested colleges may benefit from determining which programs attract skills builders, creating supports to serve them, and exploring potential short-term certificates satisfying the

needs of both skills builders and local employers. In contrast to Bahr's research, results from Zeidenberg et al.'s (2015) study concluded completion is more important than progression of courses taken, no matter the field of study. Although important to note this contrasting study, it was the only instance the research found where there were no economic benefits to taking courses for noncompleters.

Beyond the field of study, demographic measures may also affect labor market returns for skills builders. Grubb (2002) discovered, although traditional-aged students under 25 earned more by securing a certificate, this pattern reversed for older noncompleter students. Grubb (2002) wrote:

If older students are already employed and enroll for short periods of upgrade training, they will show up as noncompleters with high earnings, whereas those who enroll for retraining—dislocated workers searching for new careers, for example—are likely to complete credentials but then be forced to find entry-level employment. (p. 409)

These results demonstrated the importance of data disaggregation in understanding all the potential nuances within the skills builders segment.

### **California Community College Chancellor's Office Research**

To gain additional insights into skills builders, CCCCCO worked with researchers to develop two initiatives. Both initiatives built on Bahr's (2010) seminal work segmenting the different student groups to recognize skills builders outcomes. The first initiative added a skills-builder metric to the statewide Student Success Scorecard (SSS) available on the California Community College Chancellor's Office website. Booth et al. (2015) stated, "Including a skills-builder metric would shed light on how well colleges support workforce training at later points in students' careers, when experienced workers seek to maintain and add to skill-sets for ongoing

employment and career advancement” (p. 10). Working with WestEd, an education-based nonprofit organization, more than a year was spent examining variables to include in the skills-builder metric (Booth et al., 2015). The second initiative created the Career and Technical Education Employment Outcomes Survey (CTEOS) launched through The RP Group, a nonprofit research firm focused on community colleges, and later shifted to Santa Rosa Junior College to administer (Santa Rosa Junior College, n.d.). Through CTEOS, CCCCO and each community college receive a clearer picture of both completers and noncompleters by providing information on employment outcomes for students who have participated in career technical education (CTE) programs at California community colleges—including whether students became employed within their field of study if their community college coursework positively affected their earning potential, and why students dropped out of CTE programs. (Santa Rosa Junior College, n.d., para. 1)

Although both the SSS and CTEOS built on Bahr’s (2010) research, differences exist between the sample parameters. Bahr defined skills builders as “first-time students between the age of 18 and 50 who were successful in their coursework, took six or fewer credits, achieving a unit success rate of at least 70%, but who did not complete” (Booth & Bahr, 2013, p. 7). For the Scorecard, this definition adjusted to “take at least one non-introductory CTE course, pass all CTE courses they took, not re-enroll in any community college after one year, not earn a community college degree or certificate, and not transfer to a four-year institution” (Booth et al., 2015, p. 3). Stated college goals were not a factor for inclusion in the data set (Booth et al., 2015). As the CTEOS survey generated data for completers and noncompleters, sample qualifications expanded to include those “who completed nine or more vocational units and are no longer enrolled, or who earned a community college CTE credential” (Booth & Bahr, 2013, p.

3). It is unclear if this adjustment in minimum units completed adversely affects gathering accurate information on skills builders. Having inconsistencies in how skills builders are defined, however, does create challenges when attempting to compare studies and their results.

SSS results provide statewide or college-specific data on the change in skills builders' median earnings, with breakdowns by gender, age, ethnicity, and discipline. Earnings data gathered from the California Employment Development Department Unemployment Insurance (EDDUI) Earnings Data. Table 2.2 provides the SSS for skills builders throughout California.

**Table 2.2.**

*Statewide 2019 Student Success Scorecard*

Skills Builder		<b>+27.8%</b>
Median Earnings Change		<i>N</i> = 87,217
<b>Gender</b>	<b>Median % Change</b>	<b>Total <i>n</i></b>
Female	28.6%	38,415
Male	27.3%	47,711
<b>Age</b>	<b>Median % Change</b>	<b>Total <i>n</i></b>
Under 20	161.0%	5,342
20-24	73.3%	22,634
25-39	25.0%	38,737
40 or over	11.7%	20,492
<b>Ethnicity/Race</b>	<b>Median % Change</b>	<b>Total <i>n</i></b>
African American	25.5%	4,966
American Indian/Alaska Native	21.3%	497
Asian	34.7%	8,035
Filipino	31.4%	2,400
Hispanic	32.9%	32,131
Pacific Islander	21.3%	445
White	23.6%	32,127
<b>Disciplines with highest enrollment</b>	<b>Median % Change</b>	<b>Total <i>n</i></b>
Administration of Justice	19.5%	9,478
Child Development/Early Care and Education	33.0%	8,070
Accounting	41.9%	7,849
Police Academy	17.5%	6,103
Fire Technology	25.4%	3,892
Business and Commerce, General	37.2%	3,220
Business Management	29.8%	3,217
Office Technology/Office Computer Applications	30.8%	2,963
Emergency Medical Services	43.2%	2,811
Real Estate	20.6%	2,394



*Note.* The sum of subgroup counts may not add up to the total count due to missing demographic information. Adapted from *2019 Student Success Scorecard*, by California Community College Chancellor's Office, 2020.

(<https://scorecard.cccco.edu/scorecardrates.aspx?CollegeID=931#home>).

Although the SSS does not provide the demographic breakdowns for each category, totals allow for data analysis. For example, for gender, the total female sample was 38,415, and the total male sample was 47,711, equaling 86,126. Dividing the male sample by the total, one finds 55% of skills builders were male who saw a 27.3% increase to their median earnings. Although having skills builders data in the SSS is beneficial, requiring extra steps to create a snapshot of skills builders may hinder community college leaders' usage. Additionally, although downloadable multiple-year trend data were available for other SSS factors, it is not provided for skills builders. These aspects of the SSS may contribute to the reasons administrators and faculty largely ignore the data.

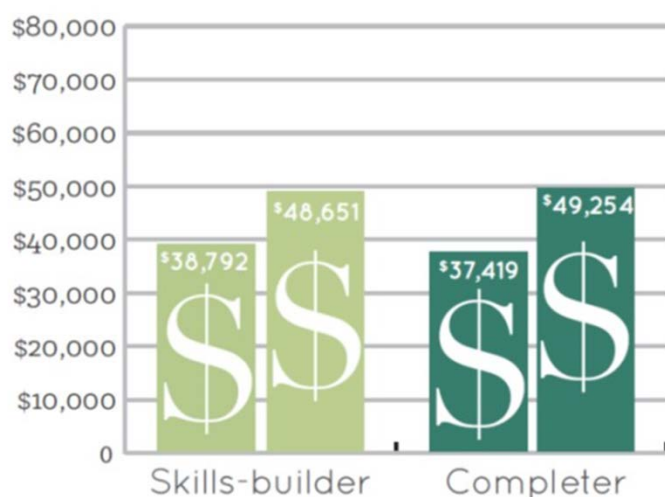
The CTEOS survey provides results for CTE students, whether they received a degree or not. This survey provides insights on reasons for attending and leaving the college, student satisfaction with the education they received, employment status, earnings before and after attendance, and the degree to which the job is related to their field of study (Alder, 2013). Additionally, the raw data file includes college-provided student demographic data, allowing for an in-depth examination into student segments.

According to *The Ones That Got Away* report, 35% of CTEOS survey respondents fell into the skills builders category, with a median age of 37 years old (Booth, 2014). Of those who responded, more than one quarter (27%) held a bachelor's degree before taking courses, and, compared to completers, skills builders saw comparable earnings gains from taking courses

(Booth, 2014). This comparison allows for a college to see skills builders as independent of completers in terms of success. Figure 2.3 depicts the comparison between completers and skills builders in terms of earning before taking courses and after leaving the community college.

**Figure 2.3.**

*Pre- and Post-College Wages by Completion Status*



*Note.* Adapted from *The Ones That Got Away: Why Completing a College Degree is Not the Only Way to Succeed* by K. Booth, 2014, p. 10. Copyright 2014 by LearningWorks.

Although results from CTEOS provided valuable information for colleges on former CTE students, statewide and college-specific visualizations do not examine results by completers versus skills builders, making it difficult to quickly analyze results from this segment for those without a research background. A community college would need to seek assistance to understand skills builders independently of the overall results. Figure 2.4 provides the statewide report for the CTEOS survey results.

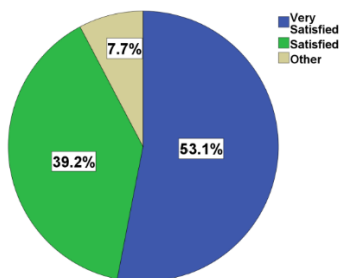
**Figure 2.4.**

*Career Technical Education Employment Outcomes Survey Statewide Report*

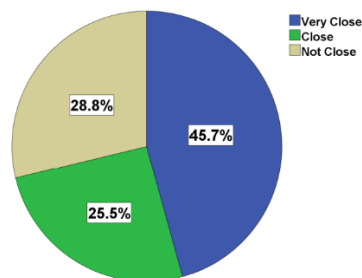


Completer and skills-building students statewide were surveyed if they met one of the following criteria in 2016-2017, and did not enroll (or were minimally enrolled) in 2017-2018: earned a certificate of 6 or more units, earned a vocational degree, or earned 9+ CTE units. The survey was administered in early 2019 by e-mail, text message (SMS), and telephone. The survey addressed student perceptions of their CTE program, employment outcomes, and how their coursework and training relate to their current career. A total of 153,106 students were surveyed and 44,429 (29%) students responded: 34% by email, 56% by phone, and 10% by SMS.

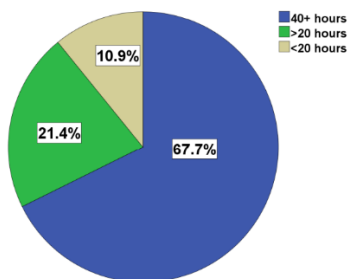
*How satisfied are students with the education and training they received?*



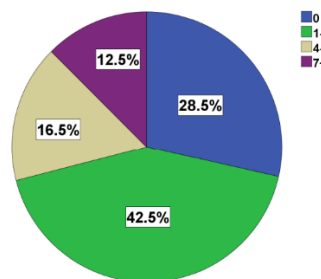
*How many students secured a job that is closely related to their program of study?*



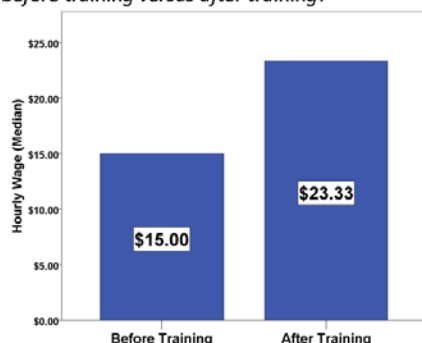
*How many hours per week are employed students working?*



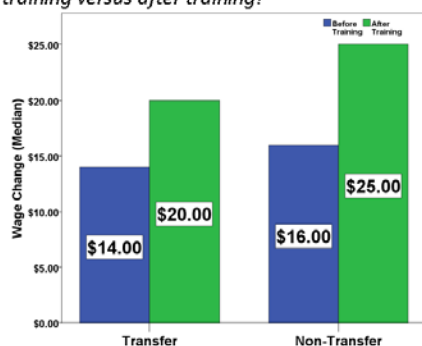
*How many months did it take for students to find a job?*



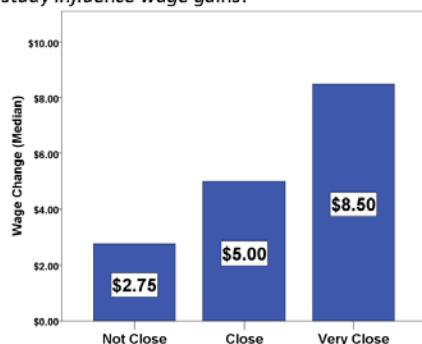
What were the hourly wages of the students before training versus after training?



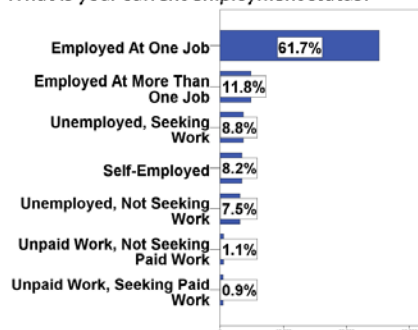
What were the hourly wages of transfer students and non-transfer students—before training versus after training?



Does the similarity between job and program of study influence wage gains?



What is your current employment status?



### More Key Results

**\$8.33** is the overall change in hourly wages after completing training—in dollars

**56%** is the overall change in hourly wages after completing training—in percentage gain

**82%** of respondents reported being employed for pay

**41%** of respondents reported transferring to another college or university

**92%** of respondents reported being very satisfied or satisfied with their training.

### Conclusion

The results of the survey showed that completing CTE studies and training – whether or not a credential is earned, whether or not a student transfers – is related to positive employment outcomes. The preponderance of respondents are employed and are working in the same field as their studies or training. Notably, students realize a greater wage gain after completing their studies if they secure a job that is similar to their program of study.

*Note.* Data visualization for 2019 CTEOS statewide survey results. Adapted from *Career & Technical Education Employment Outcomes Survey: 2019 Statewide Report*, by Santa Rosa Junior College, 2019.

(<https://cteos.santarosa.edu/sites/cteos.santarosa.edu/files/2019%20Statewide%20Report%20Final.pdf>).

A limitation exists for both the SSS and CTEOS results in the estimation of earnings data. Although SSS uses the Employment Development Department Unemployment Insurance (EDDUI) wage data, there is no guarantee students reported gains in earnings related to the community college courses. Additionally, not all skills builders exist in the EDDUI wage data, including those without valid social security numbers, and wages exist only for “those employed in an occupation covered by Unemployment Insurance in California” (CCCCO, 2020b, p. 11). Conversely, CTEOS surveys rely on students self-reporting their outcomes and earnings, which could be inaccurate, or for employment, unrelated to courses taken. Lastly, the CTEOS survey response rate is only about one third for the sample provided by all the community colleges in California (Pham et al., 2019). This response rate might skew the data if only respondents with favorable outcomes were willing to participate. Additional skills builders research will provide additional information that can be used by community colleges.

### **Exploratory Research**

Results from CTEOS spawned two qualitative research studies further exploring skills builders. Alder (2013) used responses from the CTEOS 2012 pilot study at one California community college to understand employment outcomes, what factors contributed to their success, and the relevance of programs available. Although the research included leavers or skills builders, those within this category had completed 12+ credits in the same vocational program. This threshold is higher than the current CTEOS requirement for skills builders at 9+ credits. Alder interviewed 11 former community college students, eight of whom fell into the skills builder category. Overall, findings indicated “postsecondary students concentrating in CTE program areas do find success in employment gains, career exploration, and development, and improved self-efficacy for education” (Alder, 2013, p. 99). Although these findings provided

more clarity from the CTEOS survey and touched on self-efficacy on a student's confidence in taking courses, it did not explore the value behind the courses taken. Lastly, although skills builders' interviews comprised most of the interviews, this segment was not the research's focus.

Marriott (2014) used the same CTEOS 2012 pilot survey data to investigate "the motivations and perceptions of community college career and technical education students related to their reasons for leaving programs before CTE certificate or course completion using narrative inquiry" (p. ii). Ten former CTE students from two community colleges were interviewed to gain insights into how CTE programs affect their skills and career goals and reasons for leaving the college, and how they perceive their experience (Marriott, 2014). Through interviews, the researcher learned students leaving the community college believed their courses were beneficial to their career and academic pathway. Although this study explored the motivations for attending college and meeting educational goals, it did not cover expectations for completing courses or what value occurred from coursework taken. Also, both qualitative studies defined skills builders as taking 12+ credits without completion. This definition ignores students who took fewer courses with specific education goals in mind.

By exploring the literature, knowledge of skills builders increased, including who they are and the economic benefits of taking courses. However, existing research lacks clarity on what drives these individuals, beyond stated educational goals, to attend specific classes at the community college and then exit without completion. Additionally, inconsistencies in how skills builders data are collected (e.g., completing one course, 9+ units, 12+ units) creates challenges in understanding if research results adequately cover those entering community college for skills training only. This literature gap provides the basis for a study focusing on skills builders'

motivations for taking community college courses and the value they receive from those courses toward their educational goals and job opportunities.

## **Theoretical Framework**

The research study on skills builders used the theoretical framework of expectancy-value theory (EVT) to understand their motivation to take college courses. This theory is one of many motivation theories that have evolved. To understand why EVT was selected, the researcher will review the origins of motivation theory and provide details of the theory related to this research.

### **Origins of Motivation Theory**

The study of motivation is the study of action or what influences movement toward an accomplishment (Eccles & Wigfield, 2002). Motivation guides behavior. The origins of motivation can be traced back to the *Encyclopedia of Educational Research* from 1941 to 1990 that reviewed and examined the evolving theories (Weiner, 1990). Initially, researchers perceived motivation theory as mechanical, in which drive, need, energy or arousal influenced behavior (e.g., Maslow's hierarchy of needs) and relied on nonhuman subjects (Graham & Weiner, 1996). These motivational psychologies sought to understand what initiated a change from rest to activity through experiments, such as depriving a rat of food to observe their motivation to resolve this conflict of need (Weiner, 1990).

Over time, the perception of motivation and how it is defined changed. In the 1960s, researchers acknowledged cognition, or the human factor, plays an essential role in understanding how behavior influences motivation (Graham & Weiner, 1996). Shifting to human research provided the groundwork for understanding the importance of achievement (i.e., success and failure) and allowed for opportunities to test motivation in a laboratory setting (Weiner, 1990). This swing from mechanism to cognition, in which what a person expects to get, and the

likelihood they will acquire it if they complete determines motivation, is the beginnings of the EVT (Graham & Weiner, 1996). Exploring the details behind the EVT will clarify its usage in the skills builders research study.

### **Expectancy-Value Theory**

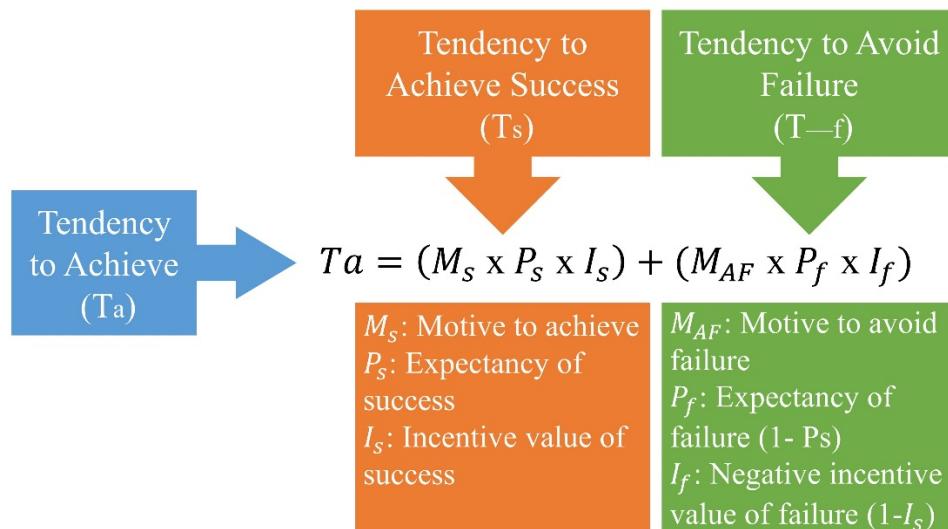
Since its inception, EVT has influenced studies seeking to explain behavior by combining the expectancy of success with the value of participation (Barron & Hulleman, 2015). As it relates to the skills builders research, this research aimed to understand motivations behind taking courses at the community college. Each EVT iteration explained in this section guided the researcher in a study explaining why skills builders matter at the community college.

Atkinson (1957) began exploring expectancy-value and achievement when studying what determined the motivation of risk-taking behavior. Atkinson's (1957) research set out "to explain how the motive to achieve and the motive to avoid failure influence behavior in a situation where performance is evaluated against some standard of excellence" (p. 371). The basic tenets of the Atkinson's research explored how a person's tendency to achieve a goal ( $T_a$ ) is a product of motive ( $M$ ), probability ( $P$ ), and incentive value ( $I$ ) for success subtracted from the same factors for failure (Graham & Weiner, 1996). Each tendency played a role in whether a task is approached or avoided. Regarding the skills builders study, Atkinson's research explained a starting point for understanding interest in taking college courses (see Figure 2.5 for the formula created from the various factors of achievement).



**Figure 2.5.**

*Atkinson's Theory of Achievement Motivation*



*Note.* Adapted from *An Introduction to Motivation* (p. 242), by J. W. Atkinson, 1964, Van Nostrand. Copyright 1964 by D. Van Nostrand Company, Inc.

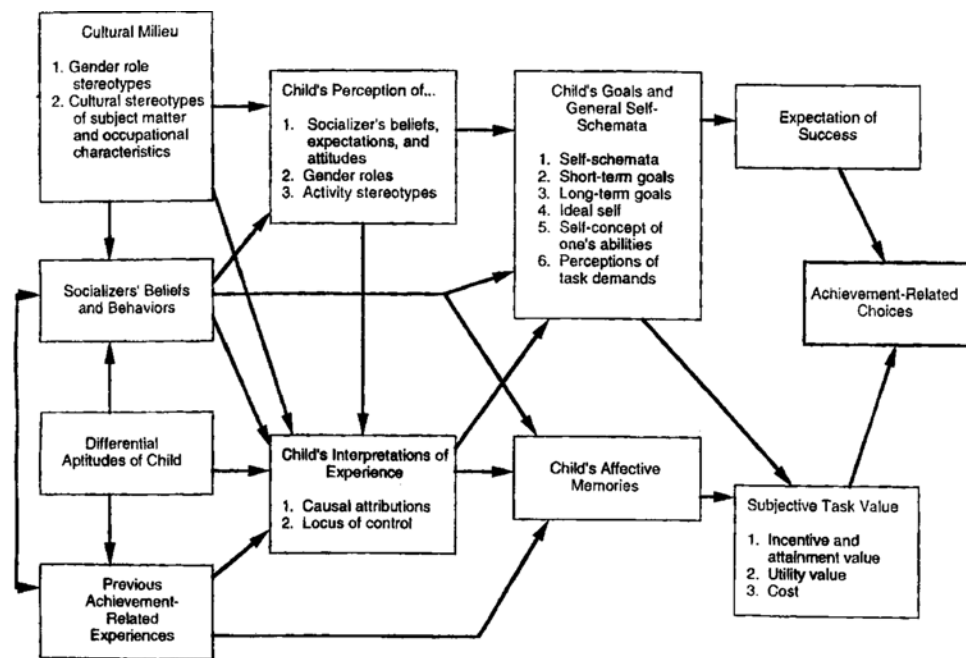
Numerous researchers have used Atkinson's theory, many analyzing and building upon the achievement motivation in student behavior (Crandall et al., 1962; Eccles, 1983; Feather, 1992; Rotter, 1966), and others have sought to use the theory in a work setting (Mitchell, 1982; Vroom, 1964). Although they each retained the essence of the original, alterations have occurred to meet research objectives. According to Wigfield (1994):

Atkinson (1957) defined expectancies as individuals' anticipations that their performance will be followed by either success or failure, and defined value as the relative attractiveness of succeeding or failing on a task. More recent researchers in the expectancy-value tradition (e.g., Eccles et al., 1983; Feather, 1982, 1988, 1992; Wigfield and Eccles, 1992) have expanded these definitions and further discussed how individuals' expectancies for success, subjective task values, and other achievement beliefs mediate their motivation and achievement in educational settings. (p. 50)

Eccles and colleagues (Eccles, 1983; Eccles & Wigfield, 2002, 2020; Eccles et al., 1998; Wigfield, 1994; Wigfield & Eccles, 1992, 2000, 2002, 2020; Wigfield et al., 2015; Wigfield et al., 2004) spearheaded the evolution to modern expectancy-value research through the exploration of children's achievement-related choices in understanding their motivation behaviors. This research expanded and linked definitions of expectation and value more directly to students' psychological, social, situational, and cultural factors (Wigfield & Eccles, 2020). Eccles (1983) developed a model showing processes guiding a student's behavior toward achievement. Although mostly unchanged over the years, recent adjustments have acknowledged underlying processes "occur over time and are very much influenced by the immediate situation in which each decision is taking place" (Eccles & Wigfield, 2020, p. 2). In essence, numerous internal and external factors influence the behavior of a student. As skills builders are attending college for a specific reason, those reasons, whether created by them or an outside factor, make the use of this theory appropriate. Additionally, the model's addition of time or the immediacy to achieving the goal further amplifies its relatedness to skills builders who attend college for specific courses for a limited period. Figure 2.6 provides the basic version of the EVT of achievement performance and choice.

**Figure 2.6.**

*Model of the Expectancy-Value Theory of Achievement*



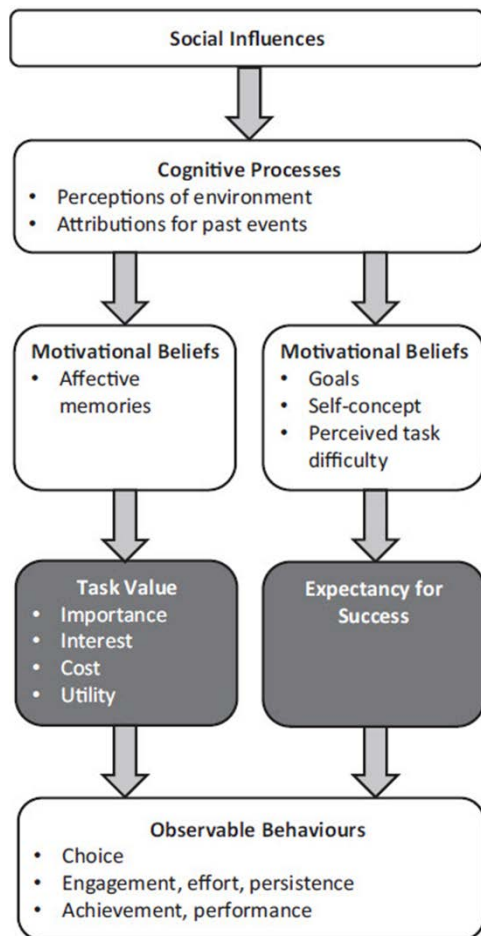
*Note.* Diagram of the Expectancy value model coined by Wigfield and Eccles. Adapted from File: Expectancy value model.png [Image], by U3068778, 2019.

([https://commons.wikimedia.org/wiki/File:Expectancy\\_value\\_model.png](https://commons.wikimedia.org/wiki/File:Expectancy_value_model.png)). CC-BY-SA-4.0.

As mentioned in the purpose, this research sought to understand motivations of short-term course taking among skills builders through their expectations of completing a task and the value behind participation in that task (see Table 1.1). The research questions created from the study purpose directly match the two basic premises within the EVT framework—expectancy for success and subjective task values—driving achievement motivation. These two factors are considered the psychological determinants acting directly on the task and activity choice, performance, and engagement in chosen activities (Eccles & Wigfield, 2020). Figure 2.7 simplifies Figure 2.6 by providing a flow chart of the intermediary processes between social influences and observable behavior (Cook & Artino, 2016).

**Figure 2.7.**

*Expectancy-Value Theory Flow Chart*



*Note.* From the Wigfield and Eccles’s theory, retaining the task value and expectancy of success drivers influencing motivational beliefs formed by cognitive processes through social influences. Adapted from “Motivation to Learn: An Overview of Contemporary Theories,” by D. A. Cook and A. R. Artino, 2016, *Medical Education* 50(10), p. 1003. Reprinted with permission.

It is important to note the multiplicative aspect of expectancy-value, as seen in Atkinson’s (1964) work (see Figure 2.5), is mostly ignored by modern educational psychologists. This omission is due to the assumption there is little chance of a zero value outcome in a school setting (Trautwein et al., 2012). However, for skills builders research, in which motivation was

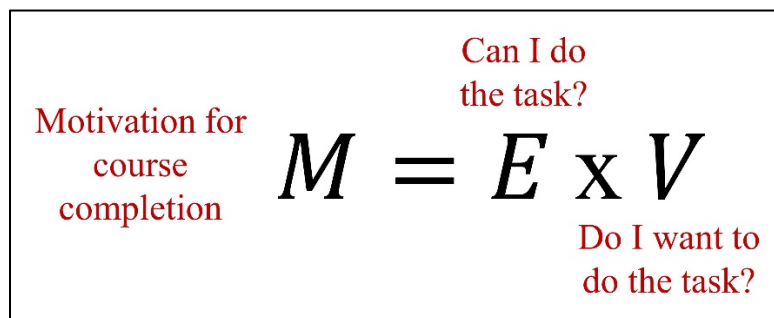
the positive synergy for expectancy of succeeding in a course and the value of those courses to educational goals and job opportunities, the multiplicative aspect remains relevant. According to Trautwein et al. (2012):

If a student did not expect to succeed on a task, even high value beliefs could not compensate for this low expectancy of success, and the student would be unlikely to choose or pursue the task. Similarly, a low task value would invariably lead to lowered motivation and engagement that could not be compensated for by a high expectancy of success. (p. 764)

Figure 2.8 provides the expectancy-value theory of motivation equation referenced in Chapter 1.

**Figure 2.8.**

*Expectancy-Value Equation Determining Motivation*



The diagram shows the Expectancy-Value Equation within a rectangular border. On the left, the text "Motivation for course completion" is written in red. In the center, the equation  $M = E \times V$  is displayed in large black font. Above the letter 'E', the text "Can I do the task?" is written in red. Below the letter 'V', the text "Do I want to do the task?" is written in red.

*Note.* Adapted from “Expectancy-value-cost model of motivation,” by K. E. Barron and C. S. Hulleman, 2015, *International Encyclopedia of the Social & Behavioral Sciences*, 2(8), p. 503. Copyright 2015 by Elsevier Ltd.

Taking each part of the equation, in turn, while keeping Figure 2.7 in mind, provides a greater understanding of the cognitive processes leading to observable behavior. First is the expectancy of success (E) or competence. Here (E) represents “a future-oriented conviction that one can accomplish the anticipated task. If I do not believe I will be successful in accomplishing a task, I am unlikely to begin” (Cook & Artino, 2016, p. 1000). The expectancy of success or

competence is a function of the Bandura (1994) self-efficacy theory “defined as people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives” (p. 2). The critical distinction in self-efficacy is an expected future belief instead of a current or immediate belief (Barron & Hulleman, 2015). For example, if an unemployed person believes they will do well on the job interview, it could be surmised there will also be high expectations of success in getting hired (Vansteenkiste et al., 2005). As seen in Figure 2.7, expectancy for success includes the three broad categories: (a) goals (learning objectives), (b) self-concept (impression of one’s ability), and (c) task difficulty (perceived not actual); demonstrating the more one invests in completing a task, the more likely they will succeed, even when considering past performance (Cook & Artino, 2016).

The second area within expectancy-value is task value (V). As Barron and Hulleman (2015) stated, “When students hold the belief that they value something, they are more likely to engage in that behavior” (p. 504). Relating this belief to skills builders, value would be the notion completing the college course will lead to a job or promotion within the current position. Eccles et al. (1998) created four motivational subcomponents within task value: (a) attainment (importance of doing well on task), (b) intrinsic (interest or enjoyment from doing the task), (c) utility (relating to current/future goals), and (d) cost (opportunity cost of making one decision over another). Importantly, task values within this theory are subjective, meaning different tasks and how they influence students rely on each persons’ perceptions, even if they vary from others or the reality of the situation (Wigfield et al., 2020).

Referencing Figures 2.7 and 2.8 and within the confines of the study, each of the flow chart elements, and the corresponding formula, are directly relatable to the research study’s use of the EVT. Skills builders, guided by social influences within their professional or personal

world, decide taking one or more courses is needed. For example, are there possible opportunities for jobs in middle-skill sectors where additional education is needed? Once established, potential skills builders will analyze current situations and past experiences to determine their willingness to continue on the path. The next factor is the motivational beliefs driving participation. This juncture is where the theory splits into expectancy and value.

For expectancy, motivation centers on what skills builders believe about their ability, the task's perceived difficulty, and the likelihood for success. If skills builders have positive perceptions of these motivational beliefs, there will be an expectancy for success. For example, will potential skills builders think they will be good students or have the time to take the class with family or work obligations? These concerns are shared with many community college students. A positive response answers the question, "Can I do the task?" As long as this factor is not negative, there is a high expectancy for success.

For value, also called task value, there is an assumption skill builders do not take classes without some end payoff. This value could be learning new skills, job promotion, satisfying a goal, or making more money now or in the future. The reason may also be tied to previous values. For example, if a skills builder attended the community college to learn Excel and received a promotion, then there may be the perception taking additional courses will provide the same result. No matter the reason, the option needs to provide an incentive. It is not enough for skills builders to know they can do the task; they must also be able to answer the question, "Do I want to do the task?" Without a positive value, it is unlikely skills builders will sign up for courses. Therefore, "in choosing whether to learn something, the task value matters most; once that choice has been made, the expectancy of success is most strongly associated with actual success" (Cook & Artino, 2016, p. 1003). As long as both expectancy and value are positive,

allowing them to be multiplied, these elements will lead to observable behaviors, such as a high motivation to complete community college courses.

Even after exploring potential reasons for skills builders to attend college using EVT, there is a gap in understanding the fundamental motivational factors within the evolving workforce considerations mentioned previously. More research is needed to understand the motivations of skills builders who attend the community college. For this reason, the EVT of motivation serves the purpose and tenets of this study.

### **Summary**

The literature highlighted gaps in understanding what motivates skills builders to take courses and exit college without a certificate or degree. With the changing workforce and expected skills gaps, the community college has an opportunity to meet evolving employer needs and increase their visibility by fully understanding why skills builders take courses and how those courses are of benefit. Although the literature provided research on skills builders, it lacked in-depth information into motivations for attendance and benefits of successful course completion. Information could adjust community college offerings and change long-held perceptions that community colleges lack in student success measures. Using the EVT of motivation guided in filling this gap.



## **Chapter 3 - Methodology**

### **Introduction**

Chapter 3 discusses the methodology used to conduct the research study. The chapter covers the study purpose, research questions, expectancy-value theoretical framework, research design, study setting, study participants, instrumentation, data collection, data analysis, data quality, ethical considerations, and limitations. A summary of key points concludes the chapter.

### **Purpose**

As previously discussed, community college attendance may be motivated by factors other than completing a degree or certificate. The purpose of this study was to explore skills builders' motivations for succeeding in courses taken at a community college and the relevance of those courses to their educational goals and job opportunities.

### **Research Questions**

The study focused on understanding what motivated skills builders to take courses at the community college. There are three primary research questions (RQs):

RQ1. What beliefs contributed to skills builders' success in community college courses?

RQ2. How relevant were completed courses to skills builders' educational goals?

RQ3. How relevant were completed courses to skills builders' job opportunities?

### **Theoretical Framework**

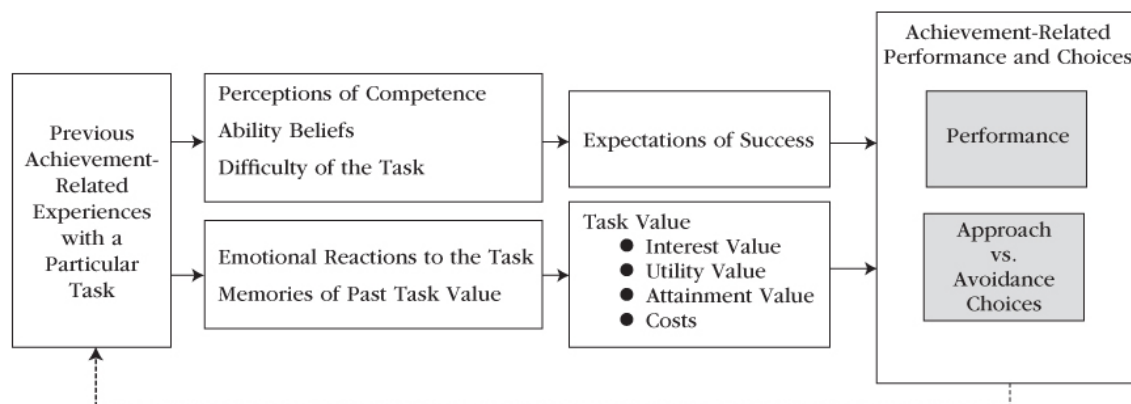
The theoretical framework provided the foundation for the study and guided the research design (Lochmiller & Lester, 2017). Expectancy-value theory (EVT) assumes student motivation requires the conviction one will be successful in completing the task or high learning achievement and the knowledge a current or future value exists; together, they determine the

choice to participate (Cook & Artino, 2016). Both factors share importance in creating the motivation for achievement.

For this study, the EVT of motivation provided an understanding of the expectation of skills builders to complete a college course (self-efficacy) and the value (i.e., educational goals and job opportunities) behind choosing to take courses. Both of these factors were vital to the tenets of this theory. As it is assumed the secondary data represented skills builders and multiple factors play into their decision to attend the community college, both internal and external, the EVT fits well with the study objectives. Figure 3.1 provides a version of the EVT guiding the theoretical framework's connection to the study parameters.

**Figure 3.1.**

*Expectancy-Value Model*



*Note.* Adapted from *File: Expectancy value model.png* [Image], by S. Hugill, 2019, Wikimedia Commons ([https://commons.wikimedia.org/wiki/File:Expectancy\\_Value\\_Model.png](https://commons.wikimedia.org/wiki/File:Expectancy_Value_Model.png)). CC BY-SA 4.0.

As depicted in Figure 3.1, a decision starts with previous experiences, then splits into the factors relating to the beliefs of expectancy (can I do the task?) and value (do I want to do the task?), ending with the observable behavior (succeeding in the college course). Therefore, this

study will cover both aspects of EVT to fully understand the skills builders population. To ensure the theory's tenets were followed, the researcher relied on the measurement scales found in published studies using EVT. The scales comprising both aspects of the theory were the New General Self-Efficacy (NGSE) scale and the Valuing of Education (VOE) scale.

The NGSE scale assessed the expectancy side of the equation and measured one's belief in achieving goals, no matter the difficulties encountered (Chen et al., 2001). Chen et al. (2001) built on Bandura's work to create an 8-question self-efficacy scale, found to be more valid and less cumbersome than scales used previously (see Table 3.1 for the NGSE scale).

**Table 3.1.**

*New General Self-Efficacy Scale*

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1. I will be able to achieve most of the goals that I have set for myself.
2. When facing difficult tasks, I am certain that I will accomplish them.
3. In general, I think I can obtain outcomes that are important to me.
4. I believe I can succeed at almost any endeavor to which I set my mind.
5. I will be able to successfully overcome many challenges.
6. I am confident that I can perform effectively on many different tasks.
7. Compared to other people, I can do most tasks very well.
8. Even when things are tough, I can perform quite well

---

*Note.* Adapted from "Validation of a New General Self-Efficacy Scale," by G. Chen, S. M.

Gully, and D. Eden, 2001, *Organizational Research Methods*, 4(1), p. 79. Copyright 2001 by SAGE Publications.

As self-efficacy directly connects to expectation, using NGSE clarified how students perceive the courses taken. For example, skills builders may potentially have competing priorities and obligations. This scale helped understand expectancy for success among skills builders, especially related to perceptions of competence, ability, and task difficulty. Using the NGSE clarified skills builders' beliefs leading to their expectation they will succeed in courses. The NGSE scale was incorporated into the survey to provide validity.

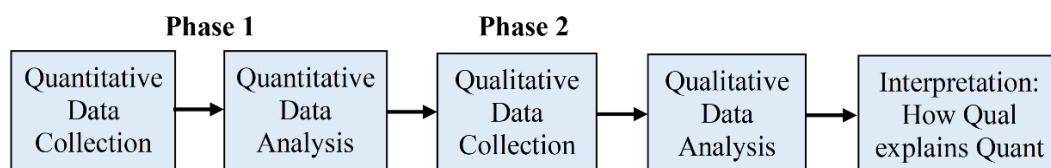
The VOE scale covered the assessment of the value aspect of the theory and was adapted from Battle and Wigfield's (2003) research exploring different aspects of why women intend to enter graduate school or engage in education. Although the researchers used EVT as their study framework, they focused on the "distinct nature of the task under consideration" (Battle & Wigfield, 2003, pp. 70-71). The VOE Scale contains four areas to measure the task value, containing 51 items covering the four areas: (a) interest (e.g., "I find the idea of being a graduate student to be very appealing."), (b) utility (e.g., "I want to get a graduate degree so that I can support myself."), (c) attainment (e.g., "A graduate education is of great personal value to me."), and (d) cost (e.g., "I don't want to take time away from a job and earning money by going to graduate school right after I graduate from college"). For the skills builders research, the VOE questions were adjusted slightly to determine why this segment choose to take courses at the community college. By implementing both the NGSE and VOE scales, the researcher believed each aspect of the EVT provided valuable insights into skills builders' motivations.

## Research Design

The research design for this study was nonexperimental, explanatory-sequential, and mixed methods. Figure 3.2 provides a visual for the process.

**Figure 3.2.**

### *Explanatory Sequential Design*

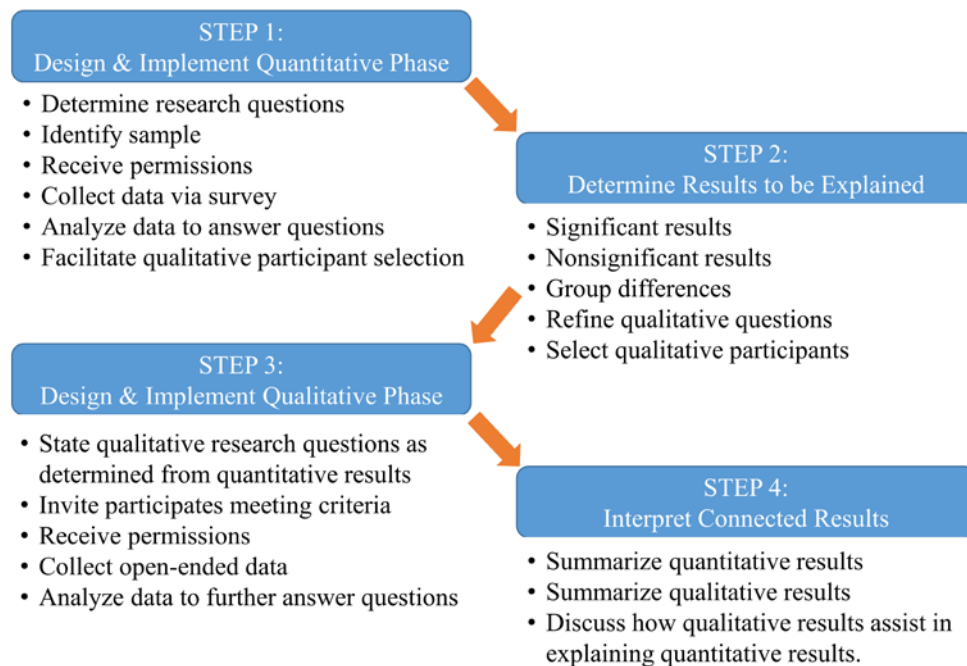


*Note.* Adapted from "Choosing a Mixed Methods Design," by J. W. Creswell and V. Plano Clark, 2011, p. 69. In J. W. Creswell and V. Plano Clark (Eds.), *Designing and conducting mixed methods research* (2nd ed.). Copyright 2011 by SAGE Publications.

As depicted in Figure 3.2, quantitative research was conducted first, followed by qualitative, creating “two distinct interactive phases” (Creswell & Plano Clark, 2011, p. 71). The quantitative phase focused on getting an overarching picture of the research questions, while the qualitative phase sought to refine and explain the specifics behind the general picture (Subedi, 2016). The survey aimed to understand who skills builders are, their reasons for taking courses, and the accuracy of their stated versus actual educational goals. Then, qualitative interviews sought to clarify the reasons behind their behavior. According to Subedi (2016), “The rationale for this approach is that the quantitative data and results provide a general picture of the research problem; more analysis, specifically through qualitative data collection, is needed to refine, extend or explain the general picture” (p. 572). Figure 3.3 depicts the steps followed to ensure accurate research implementation.

**Figure 3.3.**

*Flowchart of the Basic Procedures in Implementing an Explanatory Design*



*Note.* Adapted from “Choosing a Mixed Methods Design,” by J. W. Creswell and V. Plano Clark, 2011, p. 84. In J. W. Creswell and V. Plano Clark (Eds.), *Designing and conducting mixed methods research* (2nd ed.). Copyright 2011 by SAGE Publications.

Using this study design, the researcher intended to understand the skills builders population and their motivation factors.

### **Study Setting**

The research study occurred at College of the Desert (COD), a single district community college located in the southern California desert. The region, called the Coachella Valley, is home to approximately 416,000 residents. The Hispanic-serving institution is the only community college within a 50-mile radius, enrolling more than 16,000 full- and part-time students in 2018. Those seeking an affordable college education attend COD, including skills builders. Also, the community college is actively involved in serving the needs of the local community. All college career and technical programs have advisories where local employers provide industry perspectives; however, discussions center on programs or the development of certificates and degrees, not individual courses. Therefore, COD was chosen as the study setting because the researcher estimated skills builders’ attendance at COD for skills training, and results from the study would be valuable for advisory conversations.

### **Study Participants**

Respondents for the quantitative research phase were supplied from two separate data samples of secondary data from COD. The first sample was among students identified in the Career Technical Education Employment Outcomes Survey (CTEOS) study from 2016 to 2020 as having completed nine or more vocational units or earned a credential or degree and were no longer enrolled. The second sample was students who finished nine credits or fewer, were no

longer enrolled and did not complete a degree or certificate. The data file provided student information, including basic demographics (age, gender, and ethnicity), email, educational goals, course of study/major, course history, total credits earned, and GPA.

The researcher sent email invitations to complete the survey to all those with emails from the data files. Once the researcher received survey responses and analyzed results, the researcher used purposive sampling to create a subsample of skills builders among completed surveys in the quantitative phase. Skills builders were defined as those entering community college intending to gain skills and leave once done. Among this subsample, potential participants were selected for the qualitative phase. In total, eight interviews were conducted among skills builders before saturation was reached and followed the tenet “new data will not provide any new information or insights” (Creswell, 2002, p. 433).

### **Instrumentation**

The researcher developed a survey for the quantitative phase and an interview protocol for the qualitative phase due to the study’s mixed-method nature. Creswell (2002) explained surveys describe trends, determine opinions, identify beliefs and attitudes, and evaluate programs or situations. As the skills builders research sought to understand motivations of taking courses at the community college, this instrument was appropriate. This quantitative research allowed the researcher to investigate the reasons behind the choice to take the course and what benefits were received upon completion.

However, because survey research did not explain the particulars behind the data results, qualitative research was conducted to interpret the trends and explain behavior (Creswell, 2002). Through interviews, the researcher explored skills builders’ perceptions to create a clearer picture of who they were and why they sought education at the community college. The use of

quantitative surveys and qualitative interviews created a complete picture of the skills builders population.

## **Survey Development**

Surveys are “intended to capture the perspectives of participants at a moment in time or changes in their perspectives across a period of time” (Lochmiller & Lester, 2017, p. 133). To that end, the researcher designed an online survey to capture skills builders’ perspectives about their academic experience. Questions were a blend of Likert-scale and multiple-choice. Where needed, logic was programmed into the survey, so participants only received pertinent questions. The NGSE and VOE scales connected the study, and related research questions, to the expectancy-value theory. Topics covered followed the expectancy-value theory subthemes of expectancy or self-efficacy (i.e., self-concept or perception of competence, goals or ability beliefs, task difficulty) and value (i.e., interest, utility, attainment, costs). Additional questions from the CTEOS were included to provide information on educational goals, reasons for not enrolling, and the possible connection between courses and employment.

One open-ended question was also included in the survey. According to Roberts et al. (2014), open-ended questions “provide a direct view into a respondent’s own thinking” (p. 1065). Therefore, the inclusion of this open-ended question allowed participants to explain their motivation for taking courses in their own words, affording the researcher insights not allowed within the closed-ended survey setting. Although data files used for the sample included basic demographic data (i.e., gender, age, income, ethnicity, education level), these factors were included in the survey for data accuracy. The survey can be found in Appendix A.

The survey was programmed using Google Forms and did not exceed 10 minutes in length. A pilot survey among skills builders known to the researcher was conducted to make sure



the survey was appropriate and programmed accurately. After a successful pilot, the study launched through an email invitation that provided a link to the survey and included consent forms.

## **Interview Protocol**

One-on-one interviews were conducted among a sample of those completing the survey. The researcher developed the interview protocol used in Phase 2. Because the quantitative study results guided the creation of interview questions, a preliminary interview protocol was developed before starting the study and finalized after completing Phase 1. The qualitative phase aimed to explain the quantitative findings, with interview questions following the semistructured interview protocol. A general protocol provided topics and ideas, but the researcher had the flexibility to ask clarifying questions and be more conversational in the interview approach (Lochmiller & Lester, 2017). Before interviews began, the questions were piloted among skills builders known to the researcher. A final draft of the interview protocol can be found in Appendix B.

## **Data Collection**

Secondary data files secured from COD provided the sample for the quantitative phase. The first sample was among noncompleters and completers from the CTEOS study spanning the years 2016 through 2020. Although the study focused on skills builders, completers were emailed to cover the potential of additional education or reskilling since the CTEOS study was conducted. The second sample was among former COD students who completed nine or fewer credits and did not complete a degree or certificate. In total, email invitations were sent to 6,519 former COD students from both lists. After removing undeliverable emails from the sample, a total of 5,015 emails remained.

Participants were given 3 weeks to complete the survey, with reminders sent weekly to those who did not complete the survey. The three email invitations/reminders were sent at varying days and times to increase the likelihood of being seen and opened. Those completing the survey were entered into a random drawing to win one of three \$25 Amazon gift cards. Winners were determined by the researcher placing participant names and emails, without the corresponding survey responses, into an Excel spreadsheet, using the “randbetween” formula to generate a random number for each response, then selecting the top 3 numbers.

Upon completing the quantitative phase, the researcher compiled a list of those who indicated a willingness to participate in follow-up research. For this phase, the researcher used purposive sampling to select skills builders participants who were willing to provide information about their knowledge or experience (Etikan et al., 2016). Email invitations were sent to this sample list. Multiple reminder emails were sent to those who did not respond to the initial interview invitation. Due to COVID-19 restrictions, the researcher conducted interviews via Zoom, recorded with participant approval. Informed consent forms were provided to respondents in the final email interview confirmation and verbally affirmed before the interview started. Interviews lasted between 10 and 25 minutes, with all respondents receiving a \$20 Amazon gift card for their participation.

## **Data Analysis**

Data analysis consisted of two parts corresponding to each phase of the mixed-method research design. Survey results, collected and tracked in Google Forms, were exported into Excel and SPSS to analyze the research questions. Completed surveys included those not defined as skills builders, generating three segments – skills builders (SB), noncompleter (NC), and degree/transfer (DT) students. For the study, SB included those entering community college

intending to gain skills and left once done. NC included those who intended to complete or transfer but failed in their goal. Unlike the noncompleter definition from the previous chapter, this NC segment does not include any skills builders. DT included those who either completed a degree or certificate or transferred with or without completing. Results were then analyzed using both descriptive and inferential statistics. As explained by Williamson (2002), “Researchers use descriptive statistics when they describe the characteristics of a sample, and inferential statistics when they generalize their findings from their sample results to the broader population” (p. 90).

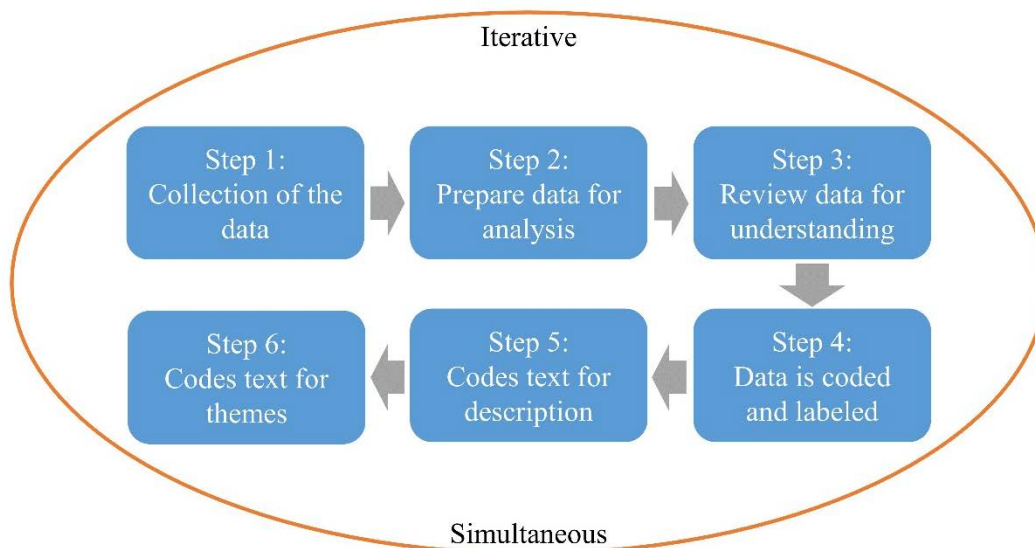
Descriptive statistics for each bucket, using SPSS, provided frequencies and percentages for most of the survey questions, such as overall motivation, benefits of coursework, gender, ethnicity, and education level. Once coded into themes, the open-ended survey question was added to the raw data file for similar SPSS analysis. This process allowed the researcher to compare segments, determine similarities and differences between groups, and understand the varying motivation factors. Results also steered the interview protocol development.

Excel was used to analyze the NGSE and VOE questions connected to the theoretical framework of expectancy value. The researcher first calculated the average score for each NGSE and VOE statement and then used  $M = E * V$  to calculate an overall motivation score for each of the three segments. Specifically, the overall average for the eight NGSE statements provided an expectancy (E) score, and the overall average for the 12 VOE statements gave the value (V) score. The researcher then multiplied the E score by the V score to get the overall motivation score for each of the three segments. This alters the formula as follows:  $M = [(E1+E2+...E8)/8] * [(V1+V2+...V12)/12]$ . Once completed, inferential statistics, using Excel, allowed for significance testing to fully analyze each study research question.

Interviews from the recorded Zoom sessions were analyzed using the six steps commonly used for analyzing qualitative data (Creswell, 2002). Figure 3.4 provides a visual of this simultaneous and iterative process used by an interviewer.

**Figure 3.4.**

*The Qualitative Process of Data Analysis*



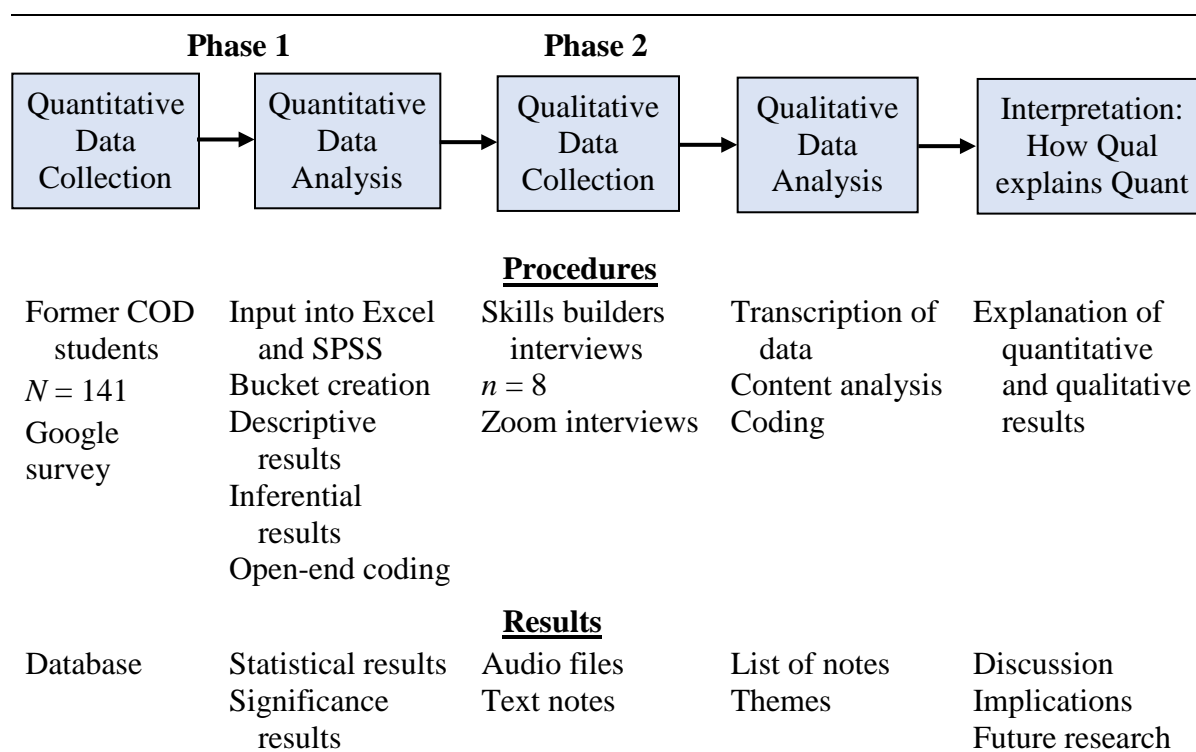
*Note.* Adapted from “The Qualitative Process of Data Analysis,” by J. W. Creswell, 2002, p. 237. In Creswell, J. W. Creswell, *Educational research: Planning, conducting, and evaluating quantitative*. Copyright 2002 by Prentice Hall.

After the first step of data collection, analyzing interview data began with transcription of the interviews. The researcher double checked the transcription accuracy by relistening to interviews while reading the text. To verify the accuracy, the researcher conducted member checking by requesting one participant to read over the transcription (Creswell, 2002). Once there was a sense of the main findings, the data were organized into themes and coded. The researcher also highlighted any quotes seen as valuable in explaining skills builders’ motivations.

Throughout data analysis, the researcher used triangulation to scrutinize the results from multiple perspectives and corroborate the findings by interpreting how the qualitative phase explains the quantitative phase (Creswell & Plano Clark, 2011). Figure 3.5 provides the procedures used and corresponding results for each phase of the explanatory sequential design used for this study.

**Figure 3.5.**

*Explanatory Sequential Design Study Specifics*



*Note.* Adapted from “Choosing a Mixed Methods Design,” by J. W. Creswell and V. Plano Clark, 2011, p. 83. In J. W. Creswell and V. Plano Clark (Eds.), *Designing and conducting mixed methods research* (2nd ed.). Copyright 2011 by SAGE Publications.

### Data Quality

Each phase of the mixed-method research needed a high level of trustworthiness. According to Lochmiller and Lester (2017), trustworthiness “is the degree to which your data

collection, analysis, and presentation of findings are presented in a thorough and verifiable manner” (p. 180). The terms used to measure trustworthiness may vary for quantitative and qualitative research, but they are equally vital. For the quantitative survey, the researcher applied questions meeting validity and reliability tests. Validity makes sure the instrument generates accurate results, and reliability means the survey is consistent in the results it provides (Creswell, 2002). The qualitative interviews maintained the same high standards of quality by adhering to credibility and dependability factors. According to Roberts and Hyatt (2019), credibility relates to how accurately the interview protocol measures what it intended to measure, and dependability determines if the study outcomes are consistent and able to be repeatable. Adherence to each of these factors assisted the researcher in minimizing study bias.

To reinforce validity, each respondent received the same survey, multiple-choice survey questions, 5-point Likert scales will be used consistently, and all questions were straightforward and included enough information not to be misinterpreted. As mentioned previously, member checking was used for interviews. Also, the researcher used triangulation to combine quantitative and qualitative research to ensure corroboration. Credibility was safeguarded by having the interview guide vetted by those within the college who have worked with skills builders and community leaders who understand the need for skill building within their workforce. Reliability was verified through the survey pilot testing and subsequent verification by the researcher before launch. The researcher sought someone outside of the study to examine the results to confirm the dependability. Using the aforementioned data quality measures above, the researcher, a current employee within the California Community Colleges system, will decrease the likelihood of bias. Table 3.2 aligns the survey questions to the theoretical framework to further verify the study’s trustworthiness.

**Table 3.2.***Alignment of Survey Questions and Research Questions*

<b>Research questions</b>	<b>EVT subthemes</b>	<b>Survey questions (abbreviated)</b>
RQ1. What beliefs contributed to skills builders' success in community college courses?	Goals	<ul style="list-style-type: none"> <li>• Achieve most of goals set for myself.</li> <li>• I will accomplish difficult tasks.</li> <li>• I can obtain important outcomes.</li> </ul>
	Self-concept	<ul style="list-style-type: none"> <li>• I can succeed at almost any endeavor.</li> <li>• I can successfully overcome challenges.</li> <li>• I am confident I can perform effectively</li> </ul>
	Task difficulty	<ul style="list-style-type: none"> <li>• Compared to other people, I do most tasks well.</li> <li>• Even when things are tough, I can perform well.</li> </ul>
	Motivation factors	<ul style="list-style-type: none"> <li>• Level of motivation to complete classes.</li> <li>• What motivated taking classes (open-end)</li> </ul>
RQ2. How relevant were completed courses to skills builders' educational goals?	Attainment value	<ul style="list-style-type: none"> <li>• Completing college courses was a personal value.</li> <li>• Completing college courses is essential.</li> <li>• Pride in completing all coursework</li> </ul>
	Interest value	<ul style="list-style-type: none"> <li>• I enjoyed the challenge of learning new skills.</li> <li>• I enjoyed learning new information and skills.</li> <li>• I enjoyed learning from experts in the field.</li> </ul>
RQ3. How relevant were completed courses to skills builders' job opportunities?	Utility value	<ul style="list-style-type: none"> <li>• Taking college courses was useful for career.</li> <li>• College courses relevant to educational goals.</li> <li>• College courses useful for job opportunities.</li> </ul>
	Costs	<ul style="list-style-type: none"> <li>• I took college courses to support family.</li> <li>• Contemplating classes worth it, even when hard.</li> <li>• Taking college courses was worth it with cost.</li> </ul>
Background for analysis of research questions	Personal factors	<ul style="list-style-type: none"> <li>• Basic demographics (age, gender, ethnicity, education, employment status, income)</li> <li>• Educational goals</li> <li>• Benefit of coursework</li> <li>• Reason for not taking classes</li> <li>• Tie between courses and current job</li> <li>• Plans for additional course taking</li> </ul>

**Ethical Considerations**

Ethics is an essential topic in research. As such, ethics needed to be considered throughout the entire research process, with questions posed in the planning and designing phase, collection phase, and reporting phase (Lochmiller & Lester, 2017). The researcher was cognizant of ethical research requirements and followed protocols to receive Kansas State University

Institutional Review Board (IRB) approval before collecting data (see Appendix D). All participants received an informed consent document and consented in stating their participation in the research was voluntary (see Appendix E). This statement will be kept on record by the researcher. At all times, respondent information remained anonymous and confidential. Whether through the survey or interviews, all data collected is on a USB flash drive and will be stored in a firebox in the researcher's home for safekeeping for 5 years.

### **Reflexivity Statement**

The researcher is a current employee at the College of the Desert as a newly hired full-time business faculty and former midlevel director of CTE projects. She has been affiliated with the college for more than 3 years, working directly with faculty, staff, and students. During this time, the researcher has served on the Data Evaluation Committee, which works to provide easy-to-understand data to college stakeholders, and coordinated activities of the Strong Workforce Steering Committee, which determines CTE projects to fund to improve outcomes for students. In addition, the researcher attends workforce development and business engagement meetings throughout the region.

Before COD, the researcher spent 25 years working in the business and nonprofit sectors. Much of this time was spent within market research, mining secondary data, conducting surveys or focus groups, and then analyzing and presenting results in an engaging way. Although the existing knowledge and experience provide a basis for the study, the researcher was cognizant of potential bias and sought not to misrepresent the data collected.

### **Limitations**

The research study covered students who attended COD only. Therefore, the research results may not be generalized to a different community college or state. Another limitation is the



students who participated in the study may not represent all those meeting the research criteria. Additionally, the research study only covered the motivations of skills builders and not all students attending a California community college. Also, because potential respondents were no longer enrolled at the college, the researcher was limited due to the higher than expected number of inactive emails provided within the sample. Lastly, although results were generalized to only skills builders who attend a California community college, it does not include those attending other higher education institutions.

### **Summary**

The researcher used the mixed-method research design to explore skills builders' motivations for succeeding in courses taken at a community college and the relevance of those courses to their educational goals and job opportunities. This chapter began with a review of the purpose, research questions, and theoretical framework. The researcher then explained the research methodology, including how the quantitative and qualitative phases would be planned, conducted, and analyzed. Specifically, the research design, study setting, study participants, instrumentation, data collection, data analysis, data quality, ethical considerations, and limitations were clarified. The study results are reported in Chapter 4 and discussed in Chapter 5.

## **Chapter 4 - Findings and Analysis**

The purpose of this study was to explore skills builders' motivations for succeeding in courses taken at a community college and the relevance of those courses to their educational goals and job opportunities. This researcher investigated these motivational factors through a quantitative survey, followed by qualitative interviews. This chapter provides the results and analysis of these two phases of research including surveys and interviews from former College of the Desert (COD) students. The analysis includes a description of the sample, demographics, and an exploration of the findings aimed at answering three research questions:

RQ1. What beliefs contributed to skills builders' success in community college courses?

RQ2. How relevant were completed courses to skills builders' educational goals?

RQ3. How relevant were completed courses to skills builders' job opportunities?

The researcher also will provide within the chapter an additional analysis comparing skills builders to noncompleters and degree/transfer students to reveal demographic and behavioral differences among groups.

### **Description of the Sample**

The secondary data files secured from COD provided the sample for the quantitative phase. For the survey launch, a total of 4,719 student emails were used, including noncompleters and completers from the Career Technical Education Employment Outcomes Survey (CTEOS) spanning the years 2016 through 2020. Although the study focused on skills builders, completers were emailed to cover the potential that additional education or reskilling occurred since the CTEOS study fielded. Of the initial email sample, 870 emails were undeliverable, leaving 3,849 potential respondents.

After fielding, the researcher received 96 surveys. A second sample of those completing nine or fewer credits was requested from COD to increase the number of overall respondents. This data file included 2,101 additional students. Once duplicate emails and completers were removed, 1,800 emails remained. To increase the likelihood of getting responses, the researcher used secondary emails listed in the data files. The same fielding stipulations were followed for the second data set. Of this email sample, 634 emails were undeliverable, leaving 1,166 potential respondents. After all fielding, the researcher received 141 completed surveys from 5,015 emails, generating a 2.8% response rate. Although the response rate was lower than anticipated, the researcher believes the study findings allow for generalizations to the larger skills builders population. The breakdown of surveys included 33 skills builders (SB), 40 noncompleter (NC), and 62 degree/transfer (DT) students. Segments were differentiated as follows: SB were those who enter community colleges intending to gain skills and leave once done, NC had the intention of completing or transferring but exited before achieving either of those goals, and DT enrolled to complete or transfer and left once accomplishing this goal. The remaining six surveys were discarded due to respondents not fitting any of the established segments.

Among the 33 skills builders who completed the survey, 23 indicated a willingness to participate in the qualitative research phase research. The researcher contacted this subset of skills builders through email and text. Ultimately, 10 interviews were scheduled, with two respondents cancelling before the scheduled time. In conducting the resultant eight interviews, the researcher was cognizant to note themes and determine the point where no new insights would be discovered by further interviews (Lochmiller & Lester, 2017). Although the researcher noted recurring themes at six interviews, an additional two interviews were conducted to ensure

saturation was reached and details behind skills builders' motivations were determined and understood.

### **Sample Demographics**

The Google Forms survey included six demographic questions of age, gender, ethnicity, level of education, employment status, and income. Skills builders for this study were more likely to be over 35, female, employed, earning at least \$50,000 per year, and possess at least an associate degree before attending COD. In addition, the sample was more likely to be Caucasian than Latino (45% and 36%, respectively). Although the researcher attempted to get a representative sample from the quantitative phase for the qualitative phase, interview participants were more likely to be older, female, and Caucasian. Table 4.1 includes the demographic breakdown for both the survey and interviews. To ensure confidentiality, interview participants were given pseudonyms when quoted throughout the research results. Table 4.2 provides a breakdown of the interviewees and their demographic characteristics.

The researcher sought to compare the gender and ethnicity of the survey sample to the data file of potential respondents to ensure results represented the larger skills builder population. Unfortunately, because not all noncompleters in the file could be categorized as skills builders defined in this study, this comparison was not possible. Further, the researcher compared gender and ethnicity of the survey respondents to the California Community College 2019 Student Success Scorecard (SSS) of skills builders. Skills builders in the SSS were slightly more likely to be female (51%) and Latino (66%). Overall, survey responses from this study varied from the SSS as respondents were more likely to be female (61%) and Caucasian (45%). However, the demographics of survey results did support existing research stating skills builders are “midcareer adults” (Adams et al., 2020, p. 76).

**Table 4.1.***Demographic Characteristics of Skills Builders*

Characteristics	Survey sample		Interview sample	
	<i>n</i> = 33	%	<i>n</i> = 8	%
Age				
18 to 24	4	12%	0	0%
25 to 34	9	27%	3	38%
35 to 44	8	24%	1	13%
45 to 54	4	12%	0	0%
55 plus	8	24%	4	50%
Gender				
Female	20	61%	6	75%
Male	13	39%	2	25%
Ethnicity				
African-American	0	0%	0	0%
Asian	1	3%	0	0%
Caucasian	15	45%	6	75%
Latino or Hispanic	12	36%	0	0%
Native American	0	0%	0	0%
Other/Unknown	0	0%	0	0%
Two or More	4	12%	2	25%
Prefer not to say	1	3%	0	0%
Level of Education				
Some High School	3	9%	1	13%
High School	9	27%	1	13%
Certificate or Trade School	1	3%	0	0%
Associate Degree	5	15%	2	25%
Bachelor's Degree	13	39%	3	38%
Master's Degree or higher	2	6%	1	13%
Employment Status				
Employed full-time	20	61%	4	50%
Employed part-time	6	18%	2	25%
Prefer not to say	3	9%	0	0%
Retired	2	6%	1	13%
Seeking opportunities for employment	2	6%	1	13%
Household Income				
Less than \$25,000	2	6%	1	13%
\$25,000 – \$49,999	8	24%	3	38%
\$50,000 – \$74,999	12	36%	2	25%
\$75,000 – \$99,999	3	9%	1	13%
\$100,000 or more	5	15%	1	13%
Prefer not to say	3	9%	0	0%

**Table 4.2.***Interviewee Demographics*

Pseudonyms	Demographics					
	Age	Gender	Ethnicity	Education	Employment	Income
The Ranger	25-34	Male	Caucasian	Bachelors	Part-time	\$75-100k
People Person	25-34	Female	Caucasian	Bachelors	Full-time	\$25-50k
Breathing Therapist	55+	Female	Caucasian	Associates	Full-time	\$50-75k
Auto Guy	25-34	Male	Caucasian	Some HS	Full-time	Not given
Lifelong Learner	55+	Female	Two+	Associates	Retired	\$25-50k
The Accountant	55+	Female	Caucasian	High School	Seeking	\$25-50k
Avid Learner	35-44	Female	Two+	Bachelors	Full-time	\$50-75k
Communicator	55+	Female	Caucasian	Masters	Part-time	>\$25k

**Specifics Around Courses Taken**

The survey included questions on reasons for attending, motivation for completing courses, reasons for leaving the college, benefit of coursework, how close courses related to current employment, and plans for taking additional courses. Responses for each of these questions are reported in the following sections.

**Reasons for Attending**

The most regularly cited reason for attending COD for skills builders was to discover/formulate career interests, plans, goals, prepare for a new career (acquire job skills), and advance in current job/career (update job skills). These three reasons were each mentioned by 39% of the respondents. Table 4.3 provides the breakdown of responses for the primary reason(s) for attending COD. Respondents were able to select multiple responses to this question.

**Table 4.3.***Primary Reason(s) for Attending COD*

Responses	Survey Sample	
	<i>n</i> = 33	%
Discover/formulate career interests, plans, goals	13	39%
Prepare for a new career (acquire job skills)	13	39%
Advance in current job/career (update job skills)	13	39%
Obtain a certificate or degree	5	15%
Other	4	12%
Maintain certificate or license	2	6%
Transfer to a 4-year institution	1	3%
Family	1	3%

**Motivation for Completing Courses**

Overall, skills builders were highly motivated to complete courses taken at COD, with 55% highly motivated and 36% motivated, totaling 91%, and generating a mean motivation score of 4.42 derived from a 5-point scale. The specifics behind this motivation were gleaned from the open-ended question about specific reasons for attending.

There were three most commonly stated reasons mentioned by respondents for being motivated to enroll at COD. The first was the ability to hone or learn new skills (39%). As one 25– to 34–year–old female wrote, “I wanted to advance my skills in accounting.” A 55+–year–old female stated having a “desire to learn new skills and hone old ones.”

This theme of honing and learning new skills was further supported in the qualitative phase of the research. People Person stated:

Right after I got my job in HR at the nonprofit, I felt like I needed some additional skills. . . . I enjoy learning and educationally I wanted to feel like I had learned something that benefited me personally and professionally. I didn’t necessarily have a goal of a degree or anything. I wanted to explore and go from there. The main thing of just learning new things.

According to Lifelong Learner, “I just really enjoy learning new things and building on my repertoire.” In addition, Accountant stated she was motivated to “take accounting courses which were related to my job, and I felt that it would help increase my skills in hopes that I could make more money.” Lastly, The Ranger summed it up by saying:

My primary motivation for taking courses at College of the Desert both as like, hey let’s keep my academic skills fresh because I know I wanted to go to Grad school at some point, and also like let’s retool myself a little bit towards a career that I’m actually more interested in. . . . I’m more intrinsically motivated by knowledge than a sheet of paper.

The second motivation stated for attending was the college offered the courses needed or desired (24%), as exemplified by 55+–year–old female writing, “The Natural Resources classes not offered anywhere else as well as the professors.” A 55+–year old male also stated he was motivated to attend because the college “offered a software course for my career.” A 35– to 44–year–old male explained, “I wanted to use my GI Bill, and COD had classes I was interested in.” Lastly, Avid Learner explained the need for the courses taken because they were “preparing us to become teachers, there was a lot of hands-on training.”

The third motivation reason for attending the community college was its location or convenience (18%). According to a 45– to 54–year–old male, “having the school so close to home made it very possible to attend classes.” A 35-44-year-old female stated it simply as it was a “location near my place.” Other keywords used were close and accessibility.

It should be noted some responses to this motivation to attend question were assigned to more than one code. Table 4.4 includes a breakdown of the level of motivation and the coding of the open-ended question on motivation for attending COD.



**Table 4.4.***Motivation for Taking Courses*

Responses	Survey sample	
	<i>n</i> = 33	%
Motivation to Complete Course(s)		
Highly motivated	18	55%
Motivated	12	36%
Neither motivated nor unmotivated	2	6%
Not motivated	1	3%
Not at all motivated	0	0%
Mean score / Top Two Box	4.42	91%
Motivation to Attend COD (open ended)		
Hone/learn new skills	13	39%
Courses offered	8	24%
Location/Convenience	6	18%
Affordable	5	15%
Change career/new opportunities	5	15%
Increase pay	2	6%
No reason given	2	6%
Family	1	3%

**Reasons for Leaving the College**

Skills builders provided multiple reasons why they stopped taking courses at COD. The top responses included goals being met (36%), relocation, family or personal reasons, and financial reasons (24% for each). Having enough time for classes, getting a job, and inability to get classes were also selected by 18% of skills builders. Table 4.5 provides a breakdown of reasons for leaving COD. Respondents were allowed to select more than one reason.

Although only mentioned by 18% of respondents, leaving college because classes were unavailable was a big concern for Avid Learner:

If you already have a bachelor's degree, you don't have the priority that some of the other students have when it comes to registering. So, most of the classes were filled up by the time my place in line came up. . . . It just was easier to pay 800 bucks to attend UCLA Extension. Even if community college was cheaper, it just wasn't feasible.

**Table 4.5.***Reasons for Leaving COD*

Responses	Survey sample	
	<i>n</i> = 33	%
My goals were met	12	36%
I relocated	8	24%
Family or personal reasons	8	24%
Financial reasons	8	24%
I didn't have enough time for classes	6	18%
I got a job	6	18%
Classes I needed were not available	6	18%
I completed the program	5	15%
My job changed	4	12%
I need more time to decide what I want	3	9%
Other	3	9%
I transferred to another school	2	6%
I am still enrolled	1	3%

**Benefit of Coursework**

Skills builders stated the primary benefit of coursework to their employment was it enabled them to learn skills to stay in their current job (21%), prepared them for a new job (21%), and enabled them to learn skills to get a new job (18%). Only 15% of skills builders stated no benefit to their employment. Table 4.6 shows the primary benefit of coursework. Respondents were limited to selecting one reason.

**Table 4.6.***Primary Benefit of Coursework*

Responses	Survey Sample	
	<i>n</i> = 32	%
Enabled me to learn skills that allowed me to stay in my current job	7	21%
Prepared me for a possible new job	7	21%
Enabled me to learn skills that allowed me to get a job at a new organization	6	18%
No benefit on my employment	5	15%
Enabled me to start my own business	3	9%

Responses	Survey Sample	
	<i>n</i> = 32	%
Enabled me to learn skills that allowed me to get a promotion at my same organization	2	6%
Other	2	6%

### **How Close Courses Related to Current Employment**

Employed skills builders, which totaled 26 respondents or 79% of the sample, were asked to indicate how closely related the courses taken at COD were to their current job. Eight in 10 stated it was either very close (42%) or close (38%). Table 4.7 provides a breakdown of responses. The seven respondents who were unemployed at the time of the research were removed from the results.

**Table 4.7.**

#### *Connection Between Courses and Current Employment*

Responses	Survey Sample	
	<i>n</i> = 26	%
Very close	11	42%
Close	10	38%
Not close	5	19%

### **Plans for Taking Additional Courses**

Lastly, skills builders were asked if they planned to take additional courses in the next 12 months. Only 30% stated intention, and another 21% were unsure (see Table 4.8 for a breakdown of responses). The skills builders sample consisted of those leaving COD from as far back as 2014 to as recently as 2018.

**Table 4.8.***Plans to Take Additional Courses*

Responses	Survey Sample	
	<i>n</i> = 33	%
Yes	10	30%
Unsure	7	21%
No	16	48%

**Skills Builders Expectancy-Value Theory Analysis**

The theoretical framework used in the research was the expectancy-value theory (EVT) of motivation. As Cook and Artino (2016) stated, EVT explains behavior by looking at “the degree to which individuals believe they will be successful if they try (expectancy of success), and the degree to which they perceive there is a personal importance, value or intrinsic interest in doing the task (task value)” (p. 1000). The quantitative phase of the study included two 5-point Likert scale questions, each with multiple statements, to cover both expectancy and value aspects of the framework.

For the expectancy portion relating to RQ1, eight statements covered the three subthemes of goals, self-concept, and task difficulty. The overall mean score for expectancy was 4.16. The value aspect of the theoretical framework, relating to RQ2 and RQ3, included 12 statements covering the four subthemes of attainment, utility, interest, and costs. The overall mean score for value was 4.30. Using the EVT formula  $M = E * V$  discussed in previous chapters, the overall motivation score for skills builders equaled 17.91, out of a possible 25.

To establish which statements were significant in explaining skills builders’ motivations and answering the research questions, the researcher calculated the confidence interval of the mean for both the expectancy and value using the formula:  $\bar{X} \pm Z\alpha \frac{\sigma}{\sqrt{n}}$ , where  $\bar{X}$  = mean score for each group of statements,  $Z\alpha$  = 95% confidence level or 1.96,  $\sigma$  = standard deviation, and  $\sqrt{n}$  =

square root of the sample size (33). The confidence interval calculated as 4.21 for expectancy and 4.39 for value. Statements above these mean scores were considered significant.

### Expectancy Findings: Research Question 1

The results of the expectancy statements guide in answering RQ1 (What beliefs contributed to skills builders' success in community college courses?) for this study. Using the confidence interval of 4.21, the researcher found three statements significant in contributing to skills builders' success in community college courses: "I believe I can achieve most of the goals I have set for myself" (4.33), "In general, I think I can reach goals that are important to me" (4.33), and "I am confident that I can perform effectively on many different tasks" (4.24). Table 4.9 shows each statement and mean score, with significant results in bold.

**Table 4.9.**

#### *Results of Expectancy Statements*

Expectancy statements	Subthemes	Mean
I believe I can achieve most of the goals I have set for myself	Goals	<b>4.33</b>
When facing difficult tasks, I am certain I will accomplish them	Goals	3.94
In general, I think I can reach goals that are important to me	Goals	<b>4.33</b>
I believe I can succeed at almost any endeavor to which I set my mind	Self-concept	4.12
I believe I will be able to overcome many challenges successfully	Self-concept	4.15
I am confident that I can perform effectively on many different tasks	Self-concept	<b>4.24</b>
Compared to other people, I can do most tasks very well	Task difficulty	4.09
Even when things are tough, I can perform quite well	Task difficulty	4.09

Many of these beliefs were supported through the interviews. Lifelong Learner stated a belief in doing well in school as follows: "I think discipline and the drive to do the best that I can, and to expand my knowledge. Because I think you keep young by continuing to learn. No matter what it is, you can become a wiser person." Avid Learner stated:

I just felt like I had the skills. I still feel like I can do well in almost any class that I take.

I'm pretty focused, determined and a hard-working student, so I don't feel like anything really deterred me.

The Ranger also voiced similar beliefs: "I don't have a whole bunch of self-confidence, but one aspect of myself that I'm confident in is that I'm good at school, so I didn't really have any internal challenges associated with that."

In conclusion, the two statements associated with expectancy showing significance and receiving the highest mean score fell within the goals subtheme relating to "specific short- and long-term learning objectives" (Cook & Artino, 2016, p. 1000). Additionally, when grouped by subtheme, the skills builders mean scores were higher for statements within goals (4.20) than self-concept (4.17) and task difficulty (4.09). Therefore, the research results show beliefs significantly contributed to skills builders' success in community college courses stem from goals relating to learning objectives.

### **Value Findings: Research Questions 2 and 3**

Before looking at RQ2 and RQ3, the researcher reviewed the results of all of the value statements. Using the confidence interval of 4.39, the researcher discovered six significant statements: "Completing college courses was of great personal value to me" (4.53), "Knowing that I completed all the work to finish the course made me feel good about myself" (4.39), "The college courses I took were relevant to my educational goals" (4.42), "I enjoyed the challenge of learning new skills from the college course" (4.55), "I enjoyed learning new information and skills in the classes I took" (4.61), and "I enjoyed learning from individuals who were experts in their field" (4.52). Table 4.10 shows each statement and mean score, with significant results in bold.

**Table 4.10.***Results of Value Statements*

Value statements	Subthemes	Mean
Completing college courses was of great personal value to me	Attainment	<b>4.53</b>
Completing college courses was essential to me being the person that I want to become	Attainment	3.85
Knowing that I completed all the work to finish the course made me feel good about myself	Attainment	<b>4.39</b>
I think taking college courses was very useful for achieving my future career aspirations	Utility	4.18
The college courses I took were relevant to my educational goals	Utility	<b>4.42</b>
The college courses were useful to me because they provided better job opportunities	Utility	4.06
I enjoyed the challenge of learning new skills from the college course	Interest	<b>4.55</b>
I enjoyed learning new information and skills in the classes I took	Interest	<b>4.61</b>
I enjoyed learning from individuals who were experts in their field	Interest	<b>4.52</b>
I took college courses so that I could better support myself, and my family	Costs	4.09
Completing classes was worth it, even though sometimes I had fears about my ability to manage the coursework	Costs	4.06
Taking college courses was worth it, even if it cost me money or time away from my family	Costs	4.36

Overall, the average mean for the subtheme of interest scored significantly higher (4.56), than attainment (4.26), utility (4.22), or costs (4.17). This high score for the subtheme of interest was further supported in the interviews, where a love of learning emerged as the central theme. Lifelong Learner stated: “I just really enjoy learning new things and building on my repertoire.” Auto Guy remarked, “I want to get a little bit of everything under my belt, just in case I change jobs or I get a better opportunity.” The Ranger simply said, “I’m a guy that likes school.” Communicator summed up the drive behind many skills builders by saying: “I love to learn. . . . I just think it’s so helpful in any line of work to continue your education at it. Nobody ever gets so good at anything that they have nothing more to learn.” Overall, research has shown skills

builders place a high value in taking classes that “might be particularly interesting or enjoyable to the learner” (Cook & Artino, 2016, p. 1002)

Looking specifically at the research questions, both of which fall under the subtheme of utility, the researcher determined skills builders found courses more relevant to educational goals than job opportunities. RQ2 (How relevant were completed courses to skills builders’ educational goals?) was determined to have a significant mean score of 4.42, and RQ3 (How relevant were completed courses to skills builders’ job opportunities?) received a 4.06 mean score, well below the 4.39 threshold for significance.

Interviews with skills builders supported the value placed on taking courses, especially toward educational goals. People Person explained the relevance of courses to educational goals as follows: “Excel was very helpful. . . . Now I feel like I have those skills to be able to figure it out. It fit the goals of learning new things.” Lifelong Learner commented, “[Courses] gave me more knowledge. For example, the classes for the plants and the desert it just gave me more knowledge, so I could go and do interpretive work.” Auto Guy stated, “My educational goals were to get as much experience that I could through COD for automotive schooling. [Courses were] definitely relevant to what I wanted because it’s things I do every day now. So, it worked out perfectly.” The Ranger also stated how courses were “relevant for filling in holes in your knowledge . . . in a cost-efficient way.”

Although course relevance to job opportunities did not show significance in the quantitative phase of the research, it was important to some of those interviewed. Lifelong Learner remarked, “I got a promotion to supervisor. Then the guys always called me for backup to take care of the problems because I was the one that could handle the upset people.” People Person stated, “I went from an HR clerk to an HR assistant. And I think those courses helped me



do that because I had a better understanding of computer systems, the payroll side, and I had more confidence in my abilities.” Lastly, Auto Guy said, “[Courses] gave me a little under a year of experience, like professionally working on vehicles. So that definitely helped when going into the interview with my now boss.”

Some of the job opportunities for interviewees came from the courses taken and from being on the college campus to use the people and services available. For example, Breathing Therapist remarked, “From being at COD, I was able to use the career center and created a resume with their help and computers and everything and counseling there too. I think . . . that’s how I got my current job.” The Ranger also explained this connection:

I came to the College of the Desert to retool with the hope of eventually getting into conservation biology. I started taking classes with that educational goal and ended up taking the class with an instructor working on a project in that exact field. So, the class was relevant to my educational goal but also ended up leading to a job opportunity.

Concluding the analysis of RQ2 and RQ3, the research shows skills builders place higher importance on their educational goals than job opportunities from completing courses at the community college.

### **Breakdown by Subgroup**

Following the complete analysis of all skills builders, the researcher explored differences among various subgroups in response to the 20 statements related to EVT. Determination of subgroups were based on survey responses and demographics, with mean and overall motivation scores calculated for each. After extensive analysis, the two subgroups providing the most insight into motivational differences among skills builders were those working in jobs very close to courses taken and Latinos.

For all skills builders, ranking the top 5 mean scores shows motivation from the value statements, as follows: “I enjoyed learning new information and skills in the classes I took” (4.61), “I enjoyed the challenge of learning new skills from the college course” (4.55), “Completing college courses was of great personal value to me” (4.53), “I enjoyed learning from individuals who were experts in their field” (4.52), and “The college courses I took were relevant to my educational goals” (4.42). Most of these statements fall under the value area of interest. As stated previously, the motivation score for all skills builders was 17.91.

When comparing skills builders to only those who work in jobs very close to courses taken, the top 5 list changes slightly: “I enjoyed learning new information and skills in the classes I took” (4.64), “Completing college courses was of great personal value to me” (4.64), “The college courses I took were relevant to my educational goals” (4.64), “Taking college courses was worth it, even if it cost me money or time away from my family” (4.64), and “I took college courses so that I could better support myself, and my family” (4.64). Thus, for this skills builders subgroup, the significant motivator fell under the subtheme of costs. For the very close skills builders subgroup, the mean score increased for expectancy (4.18) and value (4.49), generating a motivation score of 18.79.

On the other hand, the motivational factors for Latino skills builders varied more significantly than the other subgroups. Of the 20 statements, Latinos placed high importance on six statements, four of which received the same score, as follows: “Completing college courses was of great personal value to me” (4.50), “Knowing that I completed all the work to finish the course made me feel good about myself” (4.50), “I enjoyed learning new information and skills in the classes I took” (4.33), “The college courses I took were relevant to my educational goals” (4.33), “Taking college courses was worth it, even if it cost me money or time away from my

family” (4.33), and “In general, I think I can reach goals that are important to me” (4.33).

Although Latino skills builders were more likely than other subgroups to score high in attainment value, they received lower mean scores for expectancy (4.06) and value (4.23), generating a motivation score of 17.18. Table 4.11 shows a comparison of the subgroups, with the top-rated statements in bold.

**Table 4.11.**

*Expectancy-Value Statement Comparison Chart*

Results	Sub themes	Skills Builders 33	Very Close 11	Latino 12
I believe I can achieve most of the goals I have set for myself	Goals	4.33	4.18	4.17
When facing difficult tasks, I am certain I will accomplish them	Goals	3.94	4.00	3.75
In general, I think I can reach goals that are important to me	Goals	4.33	4.45	<b>4.33</b>
I believe I can succeed at almost any endeavor to which I set my mind	Self- concept	4.12	4.18	4.08
I believe I will be able to overcome many challenges successfully	Self- concept	4.15	4.36	4.08
I am confident that I can perform effectively on many different tasks	Self- concept	4.24	4.27	4.17
Compared to other people, I can do most tasks very well	Task difficulty	4.09	4.09	4.00
Even when things are tough, I can perform quite well	Task difficulty	4.09	3.91	3.92
Completing college courses was of great personal value to me	Attainment	<b>4.53</b>	<b>4.64</b>	<b>4.50</b>
Completing college courses was essential to me being the person that I want to become	Attainment	3.85	4.09	3.83
Knowing that I completed all the work to finish the course made me feel good about myself	Attainment	4.39	4.45	<b>4.50</b>
I think taking college courses was very useful for achieving my future career aspirations	Utility	4.18	4.45	4.00
The college courses I took were relevant to my educational goals	Utility	<b>4.42</b>	<b>4.64</b>	<b>4.33</b>

Results	Sub themes	Skills Builders 33	Very Close 11	Latino 12
The college courses were useful to me because they provided better job opportunities	Utility	4.06	4.55	4.00
I enjoyed the challenge of learning new skills from the college course	Interest	<b>4.55</b>	4.55	4.25
I enjoyed learning new information and skills in the classes I took	Interest	<b>4.61</b>	<b>4.64</b>	<b>4.33</b>
I enjoyed learning from individuals who were experts in their field	Interest	<b>4.52</b>	4.55	4.17
I took college courses so that I could better support myself, and my family	Costs	4.09	<b>4.64</b>	4.25
Completing classes was worth it, even though sometimes I had fears about my ability to manage the coursework	Costs	4.06	4.09	4.25
Taking college courses was worth it, even if it cost me money or time away from my family	Costs	4.36	<b>4.64</b>	<b>4.33</b>

### Analysis Between Survey Segments

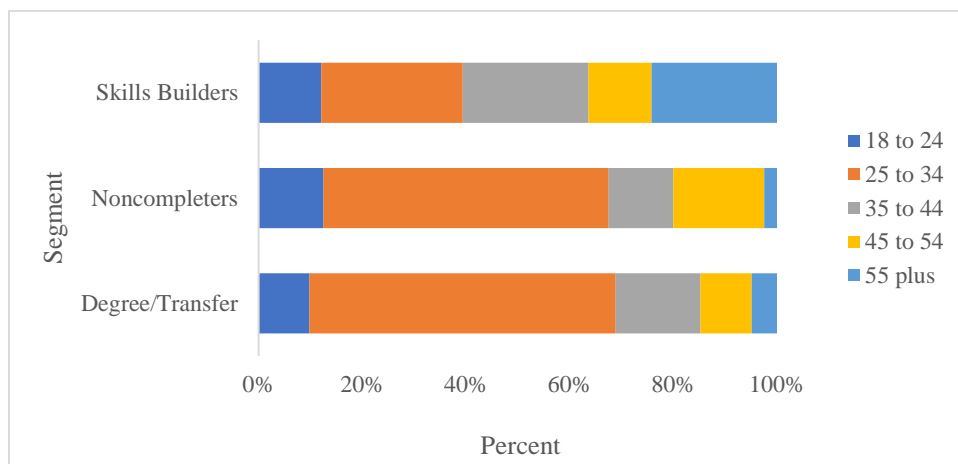
Although the main focus of the research study was to understand the skills builders segment, during the quantitative phase, responses were received from two other population segments: noncompleters and degree/transfer students. As a reminder, skills builders (SB) entered community college intending to gain skills and leave once done. Noncompleter (NC) had the intention of completing or transferring but exited before finishing. Degree/transfer (DT) students enrolled to complete or transfer and left once accomplishing this goal. This section analyzes how skills builders compare to these other groups using the difference between two proportions *t* test of significance. Using Excel, the researcher entered percentages and noted areas where significance was above the 1.96 threshold. Only factors showing relevant significance are reported.

## Demographic Differences

SB tend to be older, with 61% falling into the 35 to 55+ age range. This result was significantly higher than both NC (31%) and DT (33%), with a significance value of 2.39 and 2.83, respectively. This result was supported when calculating average age per group using the midpoint calculation. In this instance, the SB average age was 40.7 years old, compared to NC of 35.5 years old and DT of 33.8 years old. Figure 4.1 provides a visual of the age breakdown.

**Figure 4.1.**

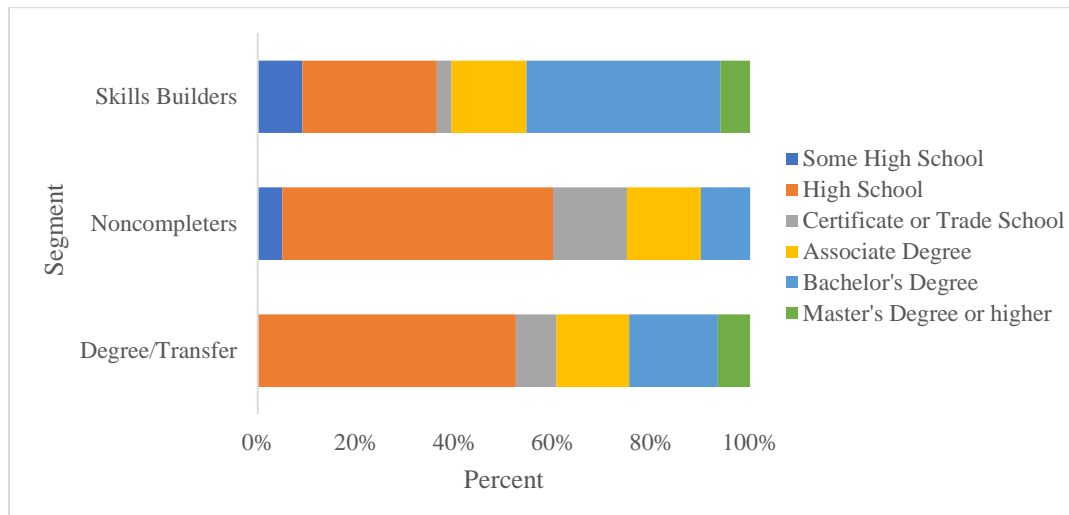
*Segment Age Breakdown*



Before taking courses, the level of education completed was another area where skills builders show significant differences to the other two groups. Forty-five percent of skills builders had at least a bachelor's degree. This result was significantly higher than noncompleters (10%) and degree/transfer students (24%), with a significance of 3.40 and 2.10. Figure 4.2 provides a visual of educational differences between segments.

**Figure 4.2.**

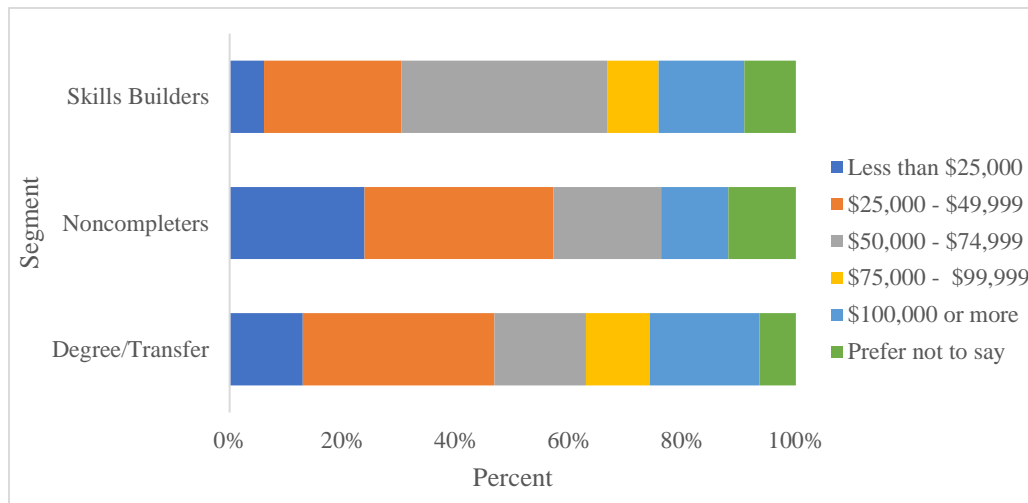
*Segment Educational Differences*



The last demographic factor showing significance was household income. Skills builders were more likely to earn \$50,000 or more (61%) than noncompleters (33%), with a significance of 2.60. Figure 4.3 shows the comparison of household income.

**Figure 4.3.**

*Comparison of Household Income*

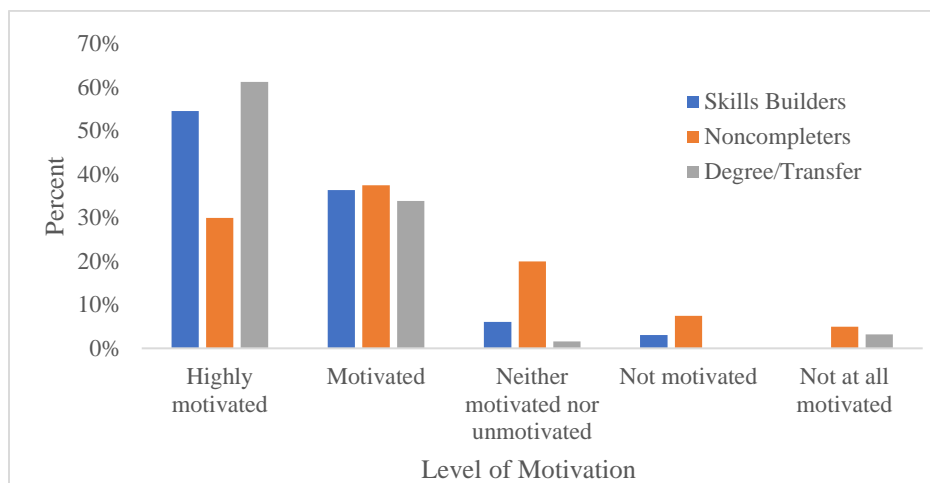


## Motivation and Course Relevance to Employment

Skills builders were much more likely to be motivated to complete courses, with 91% either highly motivated or motivated compared to 68% of noncompleters, generating a significance score of 2.38. This difference in the level of motivation was also apparent in the mean score for SB (4.42) versus NC (3.80). Figure 4.4 shows a breakdown of motivation percentages of these three subgroups.

**Figure 4.4.**

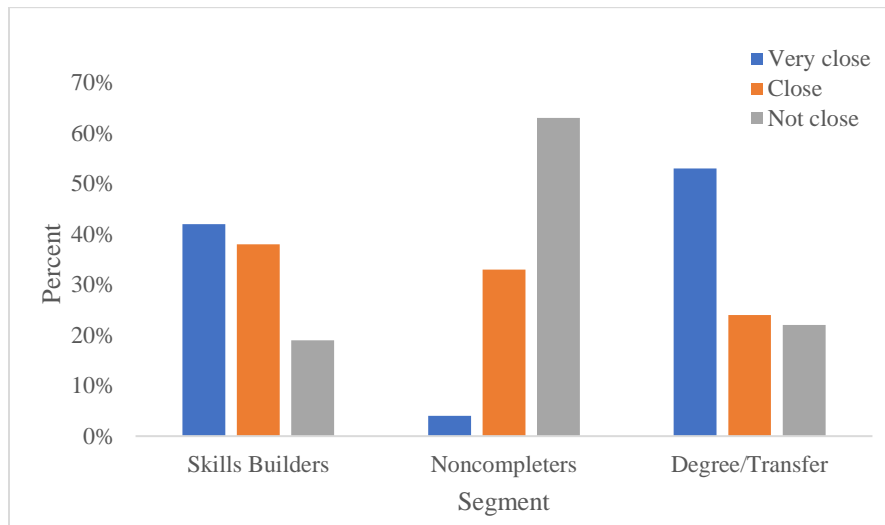
*Motivation to Complete COD Courses*



Of respondents who were employed, skills builders were significantly more likely to state their jobs were closely related to the courses taken at COD. Overall, 81% of SB stated the position was very close or close compared to 37% of NC, generating a significance score of 3.25. Figure 4.5 provides the comparison for each segment.

**Figure 4.5.**

*Closeness of Courses to Employment*



**Expectancy-Value Theory Factors**

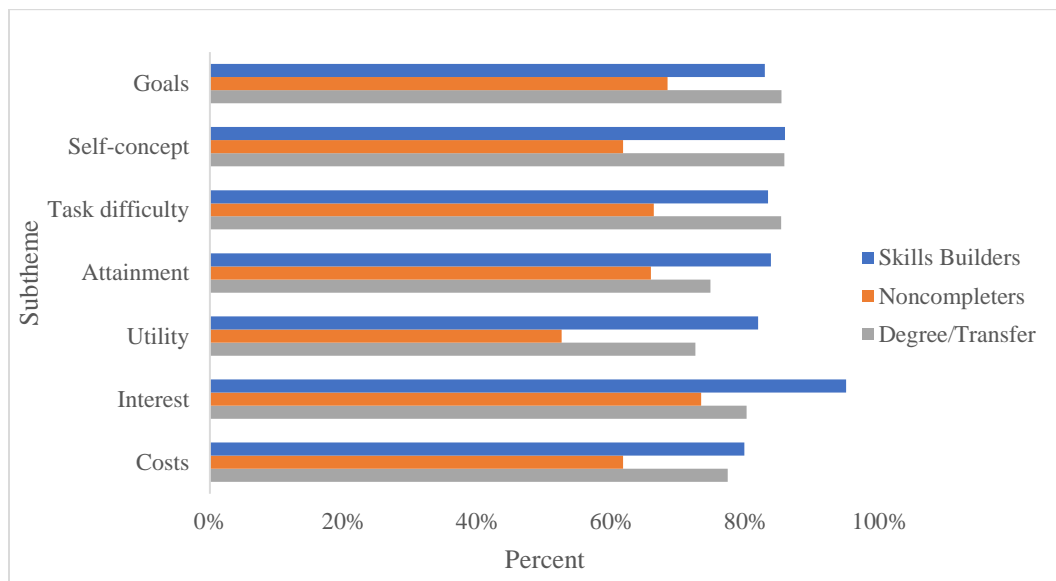
Differences exist when comparing the EVT statements among segments. To best analyze possible significance, the top 2 box percentages (those answering 4 or 5) were used. This method generated motivation scores using the  $M = E * V$  formula of 72% for skills builders, compared to 41% for NC and 65% for DT. Overall, skills builders were significantly more likely than noncompleters to be motivated to succeed, with a significance score of 2.65.

Further significance testing was conducted for the EVT subthemes to determine areas where the segments differ. Skills builders were significantly more likely than noncompleters to score high in self-concept (86% vs. 62%), utility (82% vs. 53%), and interest (95% vs. 73%), with significance scores of 2.29, 2.61, and 2.49, respectively. Figure 4.6 shows the breakdown of results by EVT subtheme.



**Figure 4.6.**

Results by EVT Subtheme



Next, the researcher analyzed each of the 20 statements and determined skills builders scored significantly higher than noncompleters for half the statements, including “I believe I will be able to overcome many challenges successfully” (3.06), “I am confident that I can perform effectively on many different tasks” (2.02), “Completing college courses was of great personal value to me” (2.38), “Knowing that I completed all the work to finish the course made me feel good about myself” (2.38), “I think taking college courses was very useful for achieving my future career aspirations” (2.20), “The college courses I took were relevant to my educational goals” (3.72), “The college courses were useful to me because they provided better job opportunities” (2.14), “I enjoyed the challenge of learning new skills from the college course” (3.15), “I enjoyed learning new information and skills in the classes I took” (2.77), and “Taking college courses was worth it, even if it cost me money or time away from my family” (2.43). In addition, skills builders scored significantly higher than degree/transfer students for the two statements: “The college courses I took were relevant to my educational goals” (2.28), and “I

enjoyed the challenge of learning new skills from the college course” (2.61). Table 4.12 provides the percentage breakdowns for all 20 statements. Percentages in bold show where NC or DT were significantly lower compared to the SB group.

**Table 4.12.**

*Segment Comparisons of Expectancy-Value Theory Statements*

	Sub themes	Skills Builders 33	Non- Completer 40	Degree/ Transfer 62
I believe I can achieve most of the goals I have set for myself	Goals	85%	73%	87%
When facing difficult tasks, I am certain I will accomplish them	Goals	73%	58%	80%
In general, I think I can reach goals that are important to me	Goals	91%	75%	89%
I believe I can succeed at almost any endeavor to which I set my mind	Self- concept	82%	63%	84%
I believe I will be able to overcome many challenges successfully	Self- concept	88%	<b>55%</b>	84%
I am confident that I can perform effectively on many different tasks	Self- concept	88%	<b>68%</b>	90%
Compared to other people, I can do most tasks very well	Task difficulty	82%	68%	84%
Even when things are tough, I can perform quite well	Task difficulty	85%	65%	87%
Completing college courses was of great personal value to me	Attainment	91%	<b>68%</b>	77%
Completing college courses was essential to me being the person that I want to become	Attainment	70%	63%	66%
Knowing that I completed all the work to finish the course made me feel good about myself	Attainment	91%	<b>68%</b>	81%
I think taking college courses was very useful for achieving my future career aspirations	Utility	82%	<b>58%</b>	74%
The college courses I took were relevant to my educational goals	Utility	94%	<b>55%</b>	<b>75%</b>

	Sub themes	Skills Builders 33	Non- Completer 40	Degree/ Transfer 62
The college courses were useful to me because they provided better job opportunities	Utility	70%	<b>45%</b>	68%
I enjoyed the challenge of learning new skills from the college course	Interest	97%	<b>68%</b>	<b>76%</b>
I enjoyed learning new information and skills in the classes I took	Interest	97%	<b>73%</b>	85%
I enjoyed learning from individuals who were experts in their field	Interest	91%	80%	79%
I took college courses so that I could better support myself, and my family	Costs	76%	63%	79%
Completing classes was worth it, even though sometimes I had fears about my ability to manage the coursework	Costs	76%	60%	74%
Taking college courses was worth it, even if it cost me money or time away from my family	Costs	88%	<b>63%</b>	79%

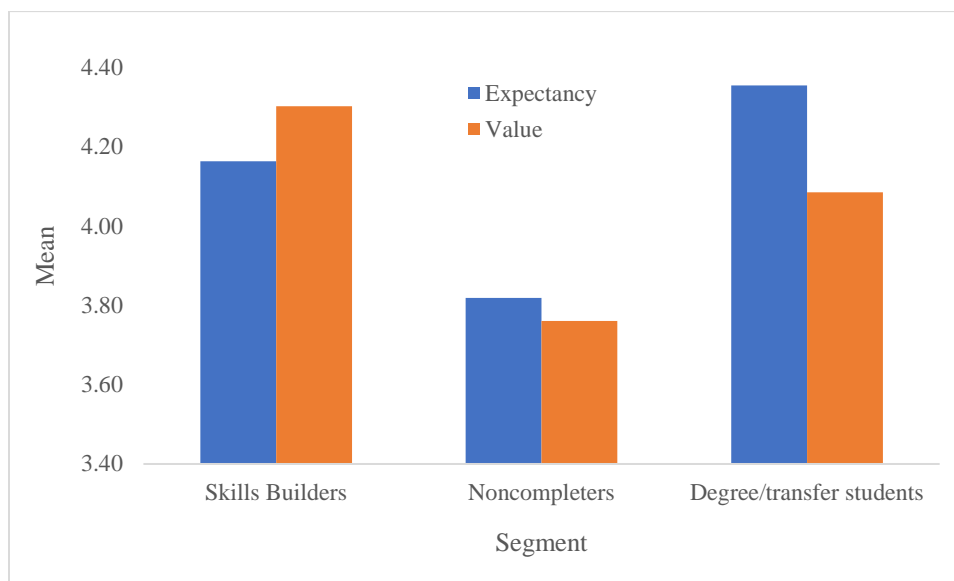
Although unrelated to significance testing, the researcher compared how each segment rated the 20 statements overall within EVT. For skills builders, the value statements ranked highest: “The college courses I took were relevant to my educational goals” (94%), “I enjoyed the challenge of learning new skills from the college course” (97%), and “I enjoyed learning new information and skills in the classes I took” (97%). For noncompleters, the top statements were a mix of expectancy and value statements: “I enjoyed learning from individuals who were experts in their field” (80%), “In general, I think I can reach goals that are important to me” (75%), and a tie between “I enjoyed learning new information and skills in the classes I took” (73%), and “I believe I can achieve most of the goals I have set for myself” (73%). Degree/transfer students, on the other hand, ranked expectancy statements highest: “I am confident that I can perform effectively on many different tasks” (90%), “In general, I think I can reach goals that are

important to me” (89%), and a tie between “I believe I can achieve most of the goals I have set for myself” (87%), and “Even when things are tough, I can perform quite well” (87%).

Looking at the mean scores of expectancy and value further supports how segments differ on influential factors. As mentioned previously, SB mean scores were 4.16 for expectancy and 4.30 for value, totaling a 17.91 motivation score. NC mean scores were 3.82 for expectancy and 3.76 for value, totaling a 14.36 motivation score. DT mean scores were 4.35 for expectancy and 4.09 for value, totaling a 17.79 motivation score. These results mirror how each segment differed in rating the 20 statements. For example, although overall motivation scores were close for skills builders and degree/transfer students, they were flipped on which factor, expectancy or value, was more important. Figure 4.7 shows the motivation factor differences for each segment.

**Figure 4.7.**

*Motivation Factors by Segment*



Although the skills builders research did not set out to compare results to other segments, results demonstrate this segment differs from both noncompleters and degree/transfer students. For example, results show skills builders as older, more educated, and earn a higher income than

the other two segments. The differences outlined in this section demonstrate the uniqueness of the skills builders population.

## **Summary**

This chapter presented the data and results from the quantitative and qualitative phases of research studying the motivation behind course taking at a community college and the relevance of those courses to their educational goals and job opportunities. Results for skills builders showed they were more likely to be over 35, female, employed, earning at least \$50,000 per year, and already possessing at least an associate degree. They are highly motivated and take courses to discover or formulate career interests, acquire job skills, and update job skills. Sixty percent of skills builders benefited from courses because they provided skills to stay in their current job, prepared them for a new job, or provided skills for a job at a new organization. Only 15% did not see any coursework benefit. Eight of 10 stated their current job is either very closely or closely related to the courses taken at COD.

The statements behind the EVT of motivation were analyzed to determine an overall motivation score and what factors influence behavior. Skills builders' motivation score was high (17.91 out of a 25 possible), especially among those employed very close to courses taken (18.79). Although taking courses to meet educational goals was important to skills builders, the love of learning emerged as the overall motivational theme. This education viewpoint was supported by high mean scores for all three statements in the interest subtheme from the value side of the theoretical framework.

Regarding the research questions, it was determined, for RQ1, the beliefs that significantly contribute to skills builders' success in community college courses relate to their goals around learning objectives. For RQ2, significance exists around the relevance of courses

taken to educational goals. Lastly, for RQ3, results did not show significance for the relevance of courses to job opportunities, although some of those interviewed supported this assertion.

In the next chapter, the researcher will summarize the study, analyze the findings, and compare findings to the literature compiled for this study. Finally, the researcher will end with implications of the study, conclusions, and recommendations for future research.

## **Chapter 5 - Conclusions and Recommendations**

This chapter summarizes the study drawn from the data analysis reviewed in Chapter 4. The chapter begins with an overview of the problem; the purpose of the study; and a review of the methodology, data collection, and analysis. The researcher will then provide a discussion of the findings and significant conclusions. The conclusions section includes implications of the study and recommendations for future research.

### **Overview of the Problem**

The changing needs of the workforce require continued training among current and future employees. Technological advancements and the need for middle skills workers—those with a high school diploma but less than a bachelor’s degree—create a gap between jobs and those qualified for those positions. This need for additional skills extends to those with existing degrees who often need to update their skills to advance their careers. Both community colleges and employers need to collaborate to ensure current and potential employees fill the skills gap to meet market demands.

With its open-door policy and cost-effective courses, community colleges provide numerous opportunities for those seeking to increase or learn new skills. These skills builders take courses for a short period of time with the desire to build specific skills and increase employability, often leaving without completing a certificate or degree. Although seen by the college as dropouts or noncompleters, most skills builders do not fit this label. They tend to be older, employed, and have existing degrees; their educational goals often exclude completion. Considering changes in technology and skills required to succeed in the workforce for both new and existing employees, colleges may need to rethink what defines success. Although research exists on who comprises skills builders and earning outcomes from attending, there remains a

gap in understanding what motivates skills builders to succeed in classes taken and if those courses were relevant to their educational goals and job opportunities. For community colleges to meet their community responsibility and serve these focused students, research was conducted to better understand these skills builders' motivations.

### **Purpose of the Study**

The purpose of this study was to explore skills builders' motivations for succeeding in courses taken at a community college and the relevance of those courses to their educational goals and job opportunities. This study addressed three research questions:

RQ1. What beliefs contributed to skills builders' success in community college courses?

RQ2. How relevant were completed courses to skills builders' educational goals?

RQ3. How relevant were completed courses to skills builders' job opportunities?

### **Review of the Methodology**

The research methodology was an explanatory sequential design mixed-method study. The first quantitative phase was a survey designed and administered to qualifying students mined from secondary college data. Due to challenges in getting completes among these former students from the college, two samples were used. The first data set included students who completed nine or more vocational units or earned a credential or degree and were no longer enrolled. The second sample included students who completed nine or fewer credits, were no longer enrolled, and did not complete a degree or certificate. Of the 5,015 deliverable emails sent, 141 surveys were completed, yielding a 2.8% response rate. The breakdown of survey participants included 33 skills builders (SB), 40 noncompleter (NC), and 62 degree/transfer (DT) students. Segments were distinguished as follows: SB were those who enter community college intending to gain skills and leave once done, NC had the intention of completing or transferring



but exited before achieving either of those goals, and DT enrolled to complete or transfer and left once accomplishing this goal. The remaining six surveys were discarded as they were respondents who did not fit any established segments.

The second qualitative phase analyzed skills builders' expectancy for success and the type of value placed on course relevance to gain more in-depth insights into the motivations behind their course-taking behavior. Potential respondents were taken from skills builders who indicated willingness in the survey to participate in interviews. Of the 33 surveys completed, 23 individuals stated interest in the qualitative phase, generating eight completed interviews before saturation was reached. Noncompleters and degree/transfer students were not interviewed for this phase of the study.

### **Data Collection and Analysis**

Study data were collected using an explanatory sequential mixed-method design, which allowed for the complete interpretation of skills builders' motivations. The first quantitative phase was an explanatory survey designed and administered to qualifying students mined from secondary college data. The survey was programmed in Google Forms and downloaded to Excel and SPSS for descriptive and inferential statistical analysis. The second qualitative phase included interviews among willing respondents from the survey. Each interview was conducted via Zoom and recorded with participant approval. Interviews were transcribed, and data were organized into themes and coded. The researcher also highlighted any quotes seen as valuable in explaining skills builders' motivations. Together, the two phases were designed to create a clear picture of skills builders who attend community college for specific courses and exit without a certificate or degree.

## **Discussion of the Findings**

The expectancy-value theory (EVT) served as the theoretical framework for this study for examining the motivations behind why skills builders take courses at community colleges. EVT explores motivations as a function of two factors—whether or not people believe they will be successful at a task and the degree to which they perceive value around task participation (Cook & Artino, 2016). Stated as an equation, motivation (M) = expectancy (E) x value (V). This study found although skills builders are highly motivated, with 91% stating very high or high motivation, they emphasized the value received from the courses (V) over the expectancy of doing well (E). As Cook and Artino (2016) stated, “In choosing whether to learn something the task value matters most” (p. 1003). This conclusion was supported when referencing the mean score differences of 4.30 for value to 4.16 for expectancy.

Specifically, within the explanatory sequential mixed-method design discussed previously, both the quantitative and qualitative results support the notion skills builders were motivated to take courses to hone or learn new skills because of their enjoyment and interest in acquiring new competencies. This focus most closely matches the interest subtheme from the value side of EVT. Although other factors may influence motivation, overall skills builders value being lifelong learners, gathering knowledge from experts in the field, and using it to grow in their life and career. These reasons tie to other motivations mentioned in the survey of wanting to take specific courses offered and the location or convenience of the college. These factors become the payoff for taking courses and a potential marketing message for the community college. These study findings were supported in the literature by Mullin and Phillippe (2013), who stated skills builders may possess a certificate or degree but choose to return to college for

additional knowledge and skills, making the community college a vital (re)launching pad for students and the local community.

Although value exceeded expectancy for all skills builders, the mean score for specific statements within each subtheme differed by subgroups. As stated previously, top mean scores showed skills builders were motivated by their intrinsic interest in doing the task. Conversely, for those employed in jobs very close to courses taken, 2 of the top 5 rated statements showed the importance of what was gained or the opportunity cost of making one decision over another (e.g., taking courses over spending time with family). On the other hand, Latinos scored highest for attainment or wanting to do well on the task as the primary value. Additionally, Latinos were the only subgroup to rank an expectancy statement—“In general, I think I can reach goals that are important to me”—within their top 5. Although this statement’s mean score was similar to other groups, Latinos placed it equivalent to their highest rated value statements, possibly showing a closer connection between aspects of expectancy and value for this subgroup.

Although all skills builders are influenced by the value received from attending college, motivations for taking courses differ when digging deeper into subgroups. These results reveal not all skills builders are the same, and reaching this broad audience may require various approaches. For community colleges, this translates to focused messaging of what courses will be of value to different subsets of skills builders. Presented next are the study findings and interpretations specific to each of the research questions as they relate to expectancy (RQ1) and value (RQ2 and RQ3).

### **Research Question 1**

The researcher used RQ1 to determine what beliefs contribute to skills builders’ success in community college courses. By analyzing the eight expectancy statements within the three

subthemes of goals, self-concept, and task difficulty, the researcher determined believing in achieving goals, thinking important goals can be reached, and confidence in performing effectively were the significant factors driving success. These three factors together, two relating to goals and one centered on self-concept, shape successful skills builders. In essence, the study findings suggest skills builders are more likely to succeed when they have clear goals around what they need to learn and have the confidence to take courses while juggling other tasks.

Although the overall results show skills builders more driven by the value of taking the courses, the expectancy element of the EVT equation remains essential to success. As stated in previous research by Trautwein et al. (2012), “If a student did not expect to succeed on a task, even high value beliefs could not compensate for this low expectancy of success, and the student would be unlikely to choose or pursue the task” (p. 764). These findings suggest community college skills builders need to see how courses meet their learning goals in a way that generates confidence in their ability to complete the class. Community colleges offering courses to satisfy these skills builders goals, scheduled to address the juggling of multiple tasks, will attract more enrollments.

## **Research Question 2**

The researcher used RQ2 to determine the relevancy of completed courses to skills builders’ educational goals. Within the 12 value statements, respondents were explicitly asked their level of agreement for the statement, “The college courses I took were relevant to my educational goals.” Overall, with a mean score of 4.42, the statement directly related to RQ2 was determined to be significant compared to other statements. Further, when shown by percentage, 94% of skills builders rated the statement around educational goals a 4 or 5 on the 5-point scale.

This top 2 score was the third highest among all 20 statements and significantly higher than results for noncompleters and degree/transfer students (55% and 75%, respectively).

Support for this significance was reinforced in interviews where respondents explained the importance of taking classes fitting their education goals, which translated to gaining knowledge for use in their career and future aspirations. These findings were supported in the research from a 2016 Pew Study stating, “More than half (54%) of adults in the labor force say it will be essential for them to get training and develop new skills throughout their work life in order to keep up with changes in the workplace” (Fry et al., 2016, p. 5). This focus on staying current for workforce needs becomes the educational goals of future skills builders. Community colleges with a solid economic or workforce development advisory board can quickly discover emerging needs and create specialized courses to meet educational goals to serve the community and help decrease the gap in middle skill jobs.

There is an unexpected finding to note here. Although the findings demonstrated relevancy of courses to educational goals, one interviewee with an existing degree who did not have priority registration often found it difficult to register for courses of interest. This complication forced the student to register elsewhere to secure the needed skills. The creation of courses specific to meeting the educational goals of skills builders can alleviate this challenge.

### **Research Question 3**

The researcher used RQ3 to determine the relevancy of completed courses to skills builders’ job opportunities. Within the 12 value statements, respondents were explicitly asked their level of agreement for the statement, “The college courses were useful to me because they provided better job opportunities.” This statement, which received a mean score of 4.06 and a top 2 score of 70%, was not seen as significant compared to other statements in the survey.

This inference, however, was not shared universally. For example, three of the eight respondents interviewed discussed how courses they took directly led to job promotions at their current companies. In addition, when asked in the survey the primary benefit of coursework taken, 60% of skills builders indicated classes provided skills to stay in their current job, prepared them for a new job, or provided skills for a job at a new organization. Only 15% of respondents stated no benefit of coursework to their employment. Interestingly, an unexpected finding was discovered when one interviewee, as a registered student, found more relevance in the career center services (e.g., resume writing workshop, job postings) than courses taken for job opportunities.

Therefore, although there was no significance in the relevancy of taking courses to job opportunities within the survey value statement, it was a notable factor for skills builders. The most regularly cited reasons for attending COD for skills builders was to discover/formulate career interests, plans, goals, prepare for a new career (acquire job skills), and advance in current job/career (update job skills), further supporting the importance of courses benefiting their career. These findings are supported from the previous research from the Work and Education Survey results for June 2020 that found 62% of Americans expressed interest in nondegree or skills training that would provide a better value, better fit to personal needs, and benefit their job and career advancement (Dunham, 2020).

Lastly, most skills builders (80%) were employed in jobs closely or very closely related to courses taken. These findings add additional support to the notion of how courses are relevant to job opportunities. community colleges working directly with local businesses can offer courses for those seeking to improve job skills and advance at their current job. For example, Microsoft Office is often used in business, but it may not be well used. Community colleges can

create these professional development opportunities that allow employee cohorts to train while coordinating with local businesses to tie participation to company opportunities.

### **Additional Findings Related to the Literature**

As findings revealed in the previous chapter, skills builders for this study were more likely to be over 35, female, employed, earning at least \$50,000 per year, and possess at least an associate degree before attending COD. Most often, once their goals were met, they left the college. These results are supported through previous research indicating skills builders are more likely to be nontraditional students (aged 25+), have clear academic goals, take specific courses, and exit college once they complete the courses of interest (Bahr, 2012; Bahr & Booth, 2012; Bailey et al., 2005). Although skills builders understand the continued need for skills, only 30% of those surveyed had an intention to return to school, with another 21% being unsure. These results may be attributed to the fact that 79% of skills builders surveyed were employed, and are guided by employer and industry needs as they arise.

In addition, when exploring demographics of age and prior education level, skills builders differentiate from noncompleters and degree/transfer students, the latter two of which were more likely to be younger and less educated. In addition, when analyzing factors associated with motivation factors tied to the theoretical framework, skills builders were more influenced by the value aspect. In contrast, noncompleters were equally motivated by expectancy and value factors, and degree/transfer students were motivated by expectancy factors. Thus, these three groups are unique in what influences their motivation.

The findings, and how they relate to previous research findings, were integrated throughout this chapter. Overall, this study provided actionable insights into the motivations of skills builders in attending the community college that fills the gap shown in the literature. In

short, skills builders are a unique student population who seek additional knowledge and skills from their education. As Smith (2016) stated, skills builders take a limited number of courses to keep their skills current and move ahead in their careers, frequently receiving economic benefits after finishing. Therefore, community colleges can speak to the value of course offerings and how participation will meet skills builders goals, whether related to gaining knowledge, reskilling to meet technology advancements, or advancing their career.

### **Implications**

This study sought to provide insights into skills builders who take courses at the community college and exit before completion. They are influenced by the desire to learn skills and gain knowledge; it is not about grades or a degree. As skills builders are motivated by different factors than noncompleters and degree/transfer students, they are likely to be assessed by a different set of outcome measures than currently used by colleges. Approximately 1 in 4 exiting CTE students are considered skills builders which represents a significant number of community college students (California Community Colleges Chancellor's Office, 2020a). Changing metrics begins with streamlining and clarifying the educational goals used within the California Community College system to make it easier for skills builders to self-identify. The current list includes 15 different educational goals in the dropdown list in the California Community College Chancellor's Office application. As a result, skills builders may select an inaccurate classification, which categorizes them as noncompleters when they exit the college.

The implication of this process change is colleges gain a more accurate depiction of skills builders. Data analysis and accurate success outcome metrics are achieved by pulling them out from the general noncompleter classification, separate from the larger degree-seeking student population. Additionally, by altering how this population is evaluated, colleges can begin



changing the perception among all college stakeholders (internal and external) that community colleges fail to serve their local community, as data analysis can demonstrate skills builders' success. College-wide presentations will assist in creating an understanding of how skills builders differ from degree-seeking and transfer students. Additionally, this new metric would allow college leaders to demonstrate to the business community that skills builders are essential to the region's economic growth and support creating an advisory to ensure courses are offered to meet the needs of local employers.

The study findings also suggest a marketing opportunity available to community colleges to reach potential skills builders and companies who need to retrain their current employees. Once the college separates skills builders from the general college population, targeted emails and other advertising campaigns can be crafted to inform potential students on upcoming skills-related courses. Overall, community colleges can be the place for all skills training. Messaging can reach those unaware of course offerings through messaging around the tenets of EVT, including the benefits of courses to reskilling and the engaging topics taught by knowledgeable instructors, while also creating confidence that learning goals can be accomplished at their local college. Information on ancillary benefits of attendance (i.e., resume workshops, job boards) can also be included.

As mentioned previously, specific messaging may vary by audience. For example, marketing to Latinos may focus more on how goals can be reached through classes at COD (E), whereas those needing courses close to their current job would receive messaging about the cost benefits of taking classes (V). Additionally, as seen from the findings, the primary motivations influencing skills builders were honing their skills, taking courses of interest, and attending someplace local or convenient. Therefore, marketing plans can incorporate these factors. For

example, success stories among former skills builders working for local companies would increase the visibility of colleges and potentially encourage businesses to send employee cohorts for skills training. As a result, colleges would benefit from increased enrollments and assists the region in workforce development.

Marketing to skills builders is mute if the courses do not exist or are not available. As Adams et al. (2020) stated, “Community colleges should accept and champion that they are the nation’s primary provider of job-focused education and training” (p. 1). This goal can start with a new skills builders metric to enable colleges to analyze skills-related courses taken over the past few semesters. By exploring enrollment patterns, a schedule can be developed to meet the needs of skills builders, especially those currently employed. Additionally, to combat enrollment challenges experienced by some skills builders, this segment would receive priority registration for skill-specific courses to ensure availability.

To determine what courses or programs may be lacking at the college, the community college would benefit from the creation of a robust advisory board. Communicating freely will allow the community to see college goals and provide the college insight into what new and emerging skills local businesses need from new and existing employees, leading to student success. Site visits can be incorporated, so college stakeholders understand how skills training applies to the workforce. For existing courses requiring multiple employees, sections can be created for company cohorts. Course suggestions can be taken to department-specific faculty to determine viability and a timeline for completion of curriculum development. For delayed courses, not-for-credit options can be explored. The implication of these changes in the community college will ensure skills builders can receive courses needed, and local businesses will be confident in sending employees for needed skills training.

Lastly, having accurate and timely data at the community college is imperative to serving the student population. Although data on student metrics are available on most college and statewide websites, it is often generalized to basic student demographics or focused on first-time, full-time students. When data are reported on skills builders, it often focuses on demographics and wage gains from attendance. As skills builders are a specialized subsection of the college with growth potential, making data more accessible is needed, especially at the faculty, director, or dean level where decisions are made on curriculum, scheduling, and programming. Expanding access to skills builders data to those in decision-making roles will allow for the effective data-informed decision making that ultimately helps this specialized student segment and the college as a whole.

### **Recommendations for Future Research**

Although the results of this study align with previous research on skills builders, several recommendations for future research need to be considered. First, significant challenges were experienced reaching former COD students to take the survey. These issues stemmed from the initial data list including those leaving COD 3 or more years prior. The researcher recommends conducting a similar study among skills builders, either attending COD or any other community college, who left the college within the past 3 years.

Second, results of this study did not allow for the complete analysis of subgroups within skills builders (i.e., 25–34 female skills builders). The researcher recommends a more extensive study, either statewide or national, to resolve this limitation. Assuming challenges around securing emails are resolved, having broader results permits community colleges to generate regional reports to get a clearer picture of skills builders and allow for compare and contrast analysis within and between regions throughout the state or country.

Third, once the skills builders metric is determined, and this population is easily identified, the researcher recommends additional research be conducted among skills builders actively taking courses. This study would allow colleges to adjust courses offerings to meet the expectations of skills builders' learning goals. Additionally, by having information on skills builders currently attending the college, instead of those exiting 1 or more years before, college leaders can present timely information to college stakeholders to garner support for current and developing programs and services.

Fourth, as this study focused on skills builders, the potential insights of the additional segments of noncompleters and degree/transfer students were not analyzed in the qualitative phase of the research. Therefore, the researcher recommends conducting a qualitative study on noncompleters and degree/transfer students to gain insights leading to a fuller understanding of how they are similar and different from skills builders.

## **Conclusion**

As the world changes and technology advances, the need for skills training among employees will continue. The purpose of this explanatory sequential design mixed-method study was to interpret why students were motivated to succeed in courses taken at community colleges and the relevance of the education they received to their educational goals and job opportunities. The study findings show skills builders value education and skills gained through courses taken, whether used to increase their overall knowledge or advance their careers. It is not about a degree or certificate. Therefore, community colleges can look to change how they measure success for this segment and work with the business community to provide future skills training.

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## Appendix A - Online Survey Materials

### Online Survey

Dear participant,

Thank you for your interest in participating in this study. Please review the project consent form.

Project title: *Why Skills Builders Matter: Understanding the motivations behind short-term course-taking among California community college noncompleters.*

Purpose/Benefit: To gather and analyze your experience taking courses at College of the Desert. Your participation will contribute to the current literature on the subject of skills builders and their motivations for succeeding in courses taken at a community college and the relevance of courses to educational goals and job opportunities.

Project approval date: 3/26/21

Project expiration date: 3/25/24

This research project is being conducted independently by Beth Allan-Bentley, who is a doctoral student utilizing this information to complete a degree at Kansas State University.

Your participation in this research project is greatly appreciated and will consist of completing this short survey, which is designed to take less than 10 minutes.

By agreeing to participate in the study, you will be giving your consent for the researcher or principal investigator to include your responses in her data analysis. Your participation in this research study is strictly voluntary, and you may choose not to participate without fear of penalty or any negative consequences. You will be able to withdraw from the survey at any time and all survey responses will be deleted, including the informed consent agreement.

Additionally, you can skip any questions you desire. The results of this research project will be published in a dissertation, but your identity will remain anonymous. Survey responses will be downloaded from Google Forms, then erased from their system. The data will be saved on an external driver for up to 5 years after the study is over. Information could be used for future research studies or distributed to another investigator for future research studies without additional informed consent.

To participate in this survey, you must meet the following criteria: 1) be 18 years or older; 2) have taken classes at College of the Desert in the past 8 years; 3) did not receive a certificate or degree as a result of the courses taken there; or 4) did not transfer to a 4-year institution.

Participation in this research is entirely voluntary, and there is no foreseeable risk or consequence to you. By completing this survey, you will be able to opt-in to a random drawing to receive one of three \$25 Amazon gift cards as an incentive for your participation.



If you have any questions about this study, you may email Beth Allan-Bentley at [babentley@ksu.edu](mailto:babentley@ksu.edu) or the committee co-chair: Terry Calaway at [terry74@ksu.edu](mailto:terry74@ksu.edu). You may also contact Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, 785-532-3224 or Cheryl Doerr, Associate Vice President for Research Compliance, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, 785-532-3224.

Thank you!

By clicking yes below, you are providing your consent to participate in this research project, which consists of completing a survey?

- a. Yes (**Take participant to the survey**)
- b. No (**Thank participant and end**)

**Following consent pre-survey:** *Thank you* again for agreeing to participate in this research. Please answer the following questions about your most recent experience taking classes at College of the Desert.

2. Which of the following were your primary reasons for taking College of the Desert classes?

Mark all that apply.

- a. Obtain a certificate or degree
- b. Transfer to a 4-year institution
- c. Discover/formulate career interests, plans, goals
- d. Prepare for a new career (acquire job skills)
- e. Advance in current job/career (update job skills)
- f. Maintain certificate or license
- g. Other (please specify)

3. In your own words, what motivated you to take classes at College of the Desert? Please be as specific as possible.

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4. Overall, how motivated were you to complete the class(es) you took at College of the Desert?

- a. Not motivated at all
- b. Not motivated
- c. Neither motivated nor unmotivated
- d. Motivated
- e. Highly motivated

5. The following statements concern your **beliefs when deciding** to take college classes. Please indicate how much you agree or disagree with the statements on a scale of 1 (strongly disagree) to 5 (Strongly agree).

	1	2	3	4	5
I believe I will be able to achieve most of the goals I have set for myself.					
When facing difficult tasks, I am certain I will accomplish them.					
In general, I think I can reach goals that are important to me.					
I believe I can succeed at almost any endeavor to which I set my mind.					
I believe I will be able to overcome many challenges successfully.					
I am confident that I can perform effectively on many different tasks.					
Compared to other people, I can do most tasks very well.					
Even when things are tough, I can perform quite well.					

6. The following statements concern your **beliefs about experiences** in taking college courses. Please indicate how much you agree or disagree with the statements on a scale of 1 (strongly disagree) to 5 (Strongly agree)

	1	2	3	4	5
Completing college courses was of great personal value to me.					
Completing college courses was essential to me being the person that I want to become.					
Knowing that I completed all the work to finish the course made me feel good about myself.					
I think taking college courses was very useful for achieving my future career aspirations.					
The college courses I took were relevant to my educational goals.					
The college courses were useful to me because they provided better job opportunities.					
I enjoyed the challenge of learning new skills from the college course.					
I enjoyed learning new information and skills in the classes I took.					
I enjoyed learning from individuals who were experts in their field.					
I took college courses so that I could better support myself, and my family.					
Completing classes was worth it, even though sometimes I had fears about my ability to manage the coursework.					
Taking college courses was worth it, even if it cost me money or time away from my family.					

7. For which of the following reasons did you stop taking classes at College of the Desert. Mark all that apply.
- a. My goals were met
  - b. I completed the program
  - c. I didn't have enough time for classes
  - d. I got a job
  - e. My job changed
  - f. I relocated
  - g. I need more time to decide what I want
  - h. Classes I needed were not available
  - i. Family or personal reasons
  - j. I transferred to another school
  - k. I am still enrolled
  - l. Financial reasons
  - m. Other (specify)
8. What was the primary benefit your coursework had on your employment?
- a. Enabled me to learn skills that allowed me to stay in my current job
  - b. Enabled me to learn skills that allowed me to get a promotion at my same organization
  - c. Enabled me to learn skills that allowed me to get a job at a new organization
  - d. Enabled me to start my own business
  - e. Prepared me for a possible new job
  - f. No benefit on my employment
  - g. Other (specify)
9. What is your current employment status?
- a. Employed full-time
  - b. Employed part-time
  - c. Seeking opportunities for employment
  - d. Retired
  - e. Prefer not to say

**If select Employed full-time or Employed part-time in Q9, please answer Q10 & Q11.**

10. In which industry is your current job?
- a. Agriculture, Forestry, Fishing and Hunting
  - b. Accommodation and Food Services (e.g., restaurant server, bartender)
  - c. Administrative and Support and Waste Management and Remediation Services (e.g., security guard)
  - d. Arts, Entertainment, and Recreation
  - e. Construction
  - f. Educational Services (e.g., teacher, tutor)
  - g. Finance and Insurance
  - h. Health Care and Social Assistance (e.g., dental hygienist, nurse, counselor, radiologic technologist, patient service representative, child daycare)
  - i. Information (e.g., library services)
  - j. Management of Companies and Enterprises

- k. Manufacturing
- l. Mining
- m. Professional, Scientific, and Technical Services (e.g., veterinary technician, accountant, paralegal, legal assistant, interior design, graphic design, tax professional)
- n. Public Administration (court operations clerk, firefighter, police or correctional officer)
- o. Real Estate Rental and Leasing (e.g., real estate agent or broker)
- p. Retail Trade (e.g., pharmacy technician, retail associate)
- q. Transportation and Warehousing (e.g., limousine driver, truck driver)
- r. Utilities
- s. Wholesale Trade
- t. Other (specify)

11. How closely related were the courses taken to your current job?

- a. Very close – my current job is in the same field as my coursework and training
- b. Close – I used what I learned in my coursework and training even though I am not working in the same exact field
- c. Not close – my studies and training are not at all related to my current job

12. Do you have any plans to take additional college courses in the next 12 months?

- a. Yes
- b. No
- c. Unsure

**If select Yes or unsure in Q12, please answer Q13.**

13. Which of the following reasons may influence your decision to return to college? Mark all that apply.

- a. Obtain a certificate or degree
- b. Transfer to a 4-year institution
- c. Discover/formulate career interests, plans, goals
- d. Prepare for a new career (acquire job skills)
- e. Advance in current job/career (update job skills)
- f. Maintain certificate or license
- g. Other (specify)

These last few questions are so the researcher can combine your answers with respondents whose demographics are similar to yours. All your answers will remain completely anonymous.

14. What is your age?

- a. 18 to 24
- b. 25 to 34
- c. 35 to 44
- d. 45 to 54
- e. 55 plus

15. What gender do you identify as?
- a. Male
  - b. Female
  - c. Other (please specify)
  - d. Prefer not to answer
16. Please specify your race or ethnicity
- a. Caucasian
  - b. African American
  - c. Latino or Hispanic
  - d. Asian
  - e. Native American
  - f. Native Hawaiian or Pacific Islander
  - g. Two or More
  - h. Other/Unknown
  - i. Prefer not to say
17. What was the highest degree or level of education you completed before taking classes at College of the Desert?
- a. Some High School
  - b. High School
  - c. Associate Degree
  - d. Bachelor's Degree
  - e. Master's Degree or higher
  - f. Certificate or Trade School
  - g. Prefer not to say
18. What is your annual household income?
- a. Less than \$25,000
  - b. \$25,000 – \$49,999
  - c. \$50,000 – \$74,999
  - d. \$75,000 – \$99,999
  - e. \$100,000 or more
  - f. Prefer not to say

**Those are all my questions today. THANK YOU again for participating.**

19. There is a possibility that additional research will be conducted. This would consist of paid interviews conducted via Zoom, scheduled in advance, and lasting no more than 30 minutes. Would you be interested in participating in this research? If selected, you will receive \$20 for your time.
- a. Yes
  - b. No

20. Would you like to be entered into a drawing for a chance to win an Amazon gift card for completing today's survey? **DRAWING ABBREVIATED RULES: NO PURCHASE NECESSARY.** Drawing open to those participating in the research study who are 18 & older as of 01/01/21. To enter, complete survey, fill in your information, and submit the survey. Limit 1 entry per person. Odds of winning depend on number of eligible entries. Prize: chance to win one of three \$25 Amazon gift cards. ARV: \$75. Remember to provide your information in the next section.
- a. Yes
  - b. No

Please provide the information below to either participate in further research or be entered into the survey drawing. Your information will not be tied to your survey responses, which will remain confidential and anonymous.

- a. Name
- b. Email
- c. Phone

Thank you for participating in the study among former students at College of the Desert to understand your motivations for taking college courses.

All the information collected in today's survey will be confidential and anonymous, and there will be no way of identifying your responses in the data archive. The researcher is not interested in any one individual's responses, but seeks to look at the general patterns that emerge when the data are aggregated together. Information could be used for future research studies or distributed to another investigator for future research studies without additional informed consent.

If you have any questions regarding this study, please feel free to contact the researcher Beth Allan-Bentley via email at [babentley@ksu.edu](mailto:babentley@ksu.edu) or cell at (XXX) XXX-XXXX.

**THANK YOU FOR YOUR TIME!**

### Online Survey Email Invitation

Dear Prospective Survey Participant,

I am a doctoral student from Kansas State University, and I am conducting a research study as part of my doctoral degree requirements. My study is entitled, *Why Skills Builders Matter: Understanding the motivations behind short-term course-taking among California community college noncompleters*. This is a letter of invitation to participate in this research study. The purpose of this study is to gather and analyze your experience taking courses at a California community college.

By agreeing to participate in the study, you will be giving your consent for the researcher or principal investigator to include your responses in her data analysis. Your participation in this research study is strictly voluntary, and you may choose not to participate without fear of penalty or any negative consequences. You will be able to withdraw from the survey at any time and all survey responses will be deleted, including the informed consent agreement.

An informed consent agreement will appear on the first screen page of the survey. There will be no individually identifiable information, remarks, comments, or other identification of you as an individual participant. All results will be presented as aggregate, summary data. If you wish, you may request a copy of the results of this research study by emailing the researcher at xxxxx@ksu.edu.

The survey will last no more than 10 minutes. Your participation will contribute to the current literature on the subject of skills builders. Completed surveys will be entered into a drawing for one of three \$25 Amazon gift cards.

The results of this research project will be published in a dissertation, but your identity will remain anonymous and confidential.

By completing this survey, you will be able to opt-in to a random drawing to receive one of three \$25 Amazon gift cards as an incentive for your participation.

[Click here to go to the survey](#)

Questions and comments about this survey may be directed to any of the following:

- Beth Allan-Bentley, [babentley@ksu.edu](mailto:babentley@ksu.edu)
- KSU Dissertation Co-Chair Terry Calaway, [terry74@ksu.edu](mailto:terry74@ksu.edu)
- Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, 785-532-3224
- Cheryl Doerr, Associate Vice President for Research Compliance, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, 785-532-3224.

Thank you for your consideration,  
*Beth Allan-Bentley*

## **Appendix B - Interview Protocols Materials**

### Interview Protocols

The following steps outline the proposed process the researcher will follow to conduct the participant semistructured interviews.

First, an email will be sent inviting those from the survey phase who indicated interest in participating in interviews. These individuals already provided consent for the quantitative phase of the research.

In the initial email, participants will be provided with a reminder of the study topic and their willingness to participate in additional research. The researcher will provide at least three options to meet for the Zoom interview, sending the link to the participant's preferred email address once the day and time are scheduled. The anticipated interview length is approximately 30 minutes.

The interviews will be video, and audio recorded. Immediately upon joining the Zoom meeting, the researcher will remind the participant of the recording and the study's voluntary nature (see script).

### Script and questions to guide the researcher's study

Good morning/afternoon, my name is Beth Allan-Bentley. I am a doctoral student at Kansas State University. Thank you for agreeing to participate in my research study, which looks at the motivations behind taking courses at the community college.

This interview should only take about 30 minutes and there are no foreseeable risks to you. The results of this research project will be published in a dissertation, but your identity will remain confidential.

With your permission, I will record and take notes during the interview, both of which will be used for transcription purposes only. Once transcribed, the recording will be deleted. If you choose not to be recorded, I will take notes instead. If you agree to being recorded but feel uncomfortable or change your mind for any reason during the interview, I can turn it off at your request. Or if you don't wish to continue, you can stop the interview at any time.

I will transcribe the recordings as soon as possible, and then erase the interview. When the research is completed, I will save the transcriptions and other study data for up to 5 years after the study is over. The same measures described above will be taken to protect confidentiality of this study data. Information could be used for future research studies or distributed to another investigator for future research studies without additional informed consent.

By completing this interview, you will receive a \$20 Amazon gift card, sent to your preferred email address.

Do you have any questions about what I have explained? May we continue with the interview?



1. Tell me a little about yourself. What do you do?
2. How long ago did you attend COD?
3. What was your motivation or the specific reason you most recently enrolled in classes at COD?
4. What were a driving forces within yourself that contributed to your ability to succeed in the classes you took? What issues, if any, did you need to overcome?
5. What were your educational goals when you came to COD? How relevant were the courses you took to those educational goals? Why?
6. What career benefits, if any, did you receive from taking the classes at the community college? (probe, if needed: job opportunities, promotion, reskilling, etc.) In what way, if at all, were they relevant to your job opportunities?
7. Do you foresee attending any community college again? If so, for what reason?
8. Do you participate in any professional development or training to improve your career skills or job opportunities? Please explain.

### Debrief

Thank you for participating in this study among former students at College of the Desert to understand your motivations for taking college courses.

All the information collected in today's interview will be confidential, and there will be no way of identifying your responses in the data archive. The researcher is not interested in any one individual's responses, but seeks to look at the general patterns that emerge when the data are aggregated together.

If you have any questions regarding this study, please feel free to contact me via email at [babentley@ksu.edu](mailto:babentley@ksu.edu) or cell at (XXX) XXX-XXXX.

## Interview Protocols – Email Invitation

Dear [participant name],

Thank you again for participating in the survey portion of my research study as part of my doctoral degree requirements. As a reminder, my study is entitled, *Why Skills Builders Matter: Understanding the motivations behind short-term course-taking among California community college noncompleters*.

You indicated willingness to participate in the next phase of research that will consist of a Zoom interview lasting no more than 30 minutes of your time. You will receive a \$20 Amazon gift card for your time. The results of this research project will be published in a dissertation, but your identity will remain confidential.

To schedule this study's interview component, please reply to this email with at least three dates and times convenient for you. Once confirmed, you will receive a meeting invitation with the Zoom link. With your permission, the session will be recorded and transcribed, but, these data will be available only to you and me. Again, your participation is voluntary.

Questions and comments about this study may be directed to any of the following:

- Beth Allan-Bentley, [babentley@ksu.edu](mailto:babentley@ksu.edu)
- KSU Dissertation Co-Chair Terry Calaway, [terry74@ksu.edu](mailto:terry74@ksu.edu)
- Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, 785-532-3224
- Cheryl Doerr, Associate Vice President for Research Compliance, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, 785-532-3224.

Thank you for your consideration,

*Beth Allan-Bentley*

## Interview Protocols – Follow-up Email and Informed Consent

Dear [participant name],

Thank you for your interest in participating in this study. Please review the project consent form.

Project title: *Why Skills Builders Matter: Understanding the motivations behind short-term course-taking among California community college noncompleters.*

Purpose/Benefit: To gather and analyze your experience taking courses at College of the Desert. Your participation will contribute to the current literature on the subject of skills builders and their motivations for succeeding in courses taken at a community college and the relevance of courses to educational goals and job opportunities.

Project approval date: 3/26/21

Project expiration date: 3/25/24

This research project is being conducted independently by Beth Allan-Bentley, who is a doctoral student utilizing this information to complete a degree at Kansas State University.

Your participation in this research project is greatly appreciated and will consist of participating in a Zoom interview, which is designed to take 30 minutes, and there are no foreseeable risks to you. The results of this research project will be published in a dissertation, but your identity will remain confidential.

By agreeing to participate in the study, you will be giving your consent for the researcher or principal investigator to include your responses in her data analysis. Your participation in this research study is strictly voluntary, and you may choose not to participate without fear of penalty or any negative consequences.

Participation in this research is entirely voluntary, and there is no foreseeable risk or consequence to you. By completing this interview, you will receive a \$20 Amazon gift card, sent to your preferred email address.

If you have any questions about this study, you may email Beth Allan-Bentley at [babentley@ksu.edu](mailto:babentley@ksu.edu) or the committee co-chair: Terry Calaway at [terry74@ksu.edu](mailto:terry74@ksu.edu). You may also contact Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, 785-532-3224 or Cheryl Doerr, Associate Vice President for Research Compliance, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, 785-532-3224.

By responding to this email with your preferred date, you are consenting to participate in the Zoom interview. With your permission, the session will be recorded and transcribed, but, these data will be available only to you and me. Again, your participation is voluntary.

Thank you!

## Appendix C - Internal Review Board Documentation



TO: Terry Calaway

Proposal Number IRB-10634

FROM: Rick Scheidt, Chair  
Committee on Research Involving Human Subjects

DATE: 03/29/2021

RE: Approval of Proposal Entitled, "Why skills builders matter: Understanding the motivations behind short-term course-taking among California community college noncompleters."

The Committee on Research Involving Human Subjects has reviewed your proposal and has granted full approval. This proposal is **approved for three years from the date of this correspondence.**

APPROVAL DATE: 03/26/2021

EXPIRATION DATE: 03/25/2024

In giving its approval, the Committee has determined that:

No more than minimal risk to subjects

This approval applies only to the proposal currently on file as written. Any change or modification affecting human subjects must be approved by the IRB prior to implementation. All approved proposals are subject to continuing review, which may include the examination of records connected with the project. Announced post-approval monitoring may be performed during the course of this approval period by URCO staff. Injuries, unanticipated problems or adverse events involving risk to subjects or to others must be reported immediately to the Chair of the IRB and / or the URCO.

Electronically signed by Rick Scheidt on 03/29/2021 10:07 AM ET